

**RESOURCE GUIDE**  
**of STATE FRAUD & ABUSE SYSTEMS**



**A Product of**  
**the National Medicaid Fraud & Abuse Initiative's**  
**Information Systems Workgroup**

**October 2001**

## TABLE OF CONTENTS

Executive Summary .....	4
Brief Description of the Questionnaire	
Observations	
Inconsistencies	
Note of Thanks	
A. Background .....	8
B. Questionnaire Responses	
Section I -- States' Existing Surveillance and Utilization Review Subsystems (SURS) .....	9
Type of SURS	
Characteristics of State SURS	
Enhancements Made to State SURS	
Access to SUR or FAD Systems	
Section II – SURS Enhancement Systems Used by the States.....	18
SURS Enhancement Systems	
Reasons for Acquiring Enhancement Systems	
Section III – Features and Characteristics of the State Systems .....	25
Automated Tools or Functions Used in Detecting F&A	
Data Query Capabilities	
Data Mining Capabilities	
Statistically Valid Random Sampling	
Ability to Import/Export Data	
Ability to Process Large Data Sets	
Effective F&A Detection Filters/Algorithms	
Section IV – Vendor Products/Services Used by the States .....	39
Vendor Products/Services	
Strengths of Vendor Products/Services	
Section V – Planned Replacements and/or Enhancements.....	47
Planned Replacements/Enhancements	
Anticipated Timeframes for Upgrades or Replacements	
Wish List	
Section VI – Innovative Data Collection and Reporting Methods/Best Practices.....	50
Effective Practices in Using Existing Information Systems	
Innovative Features of State Systems	
Beneficiary Fraud and Abuse Data Collection	
Managed Care Fraud and Abuse Data Collection	

<b>C. Acronyms Used in the Guide .....</b>	<b>62</b>
<b>D. Capsule Definitions of Key Database Tools and Functions.....</b>	<b>65</b>
<b>E. State SURS Contacts.....</b>	<b>67</b>
<b>Appendix I: Vendors Summary.....</b>	<b>69</b>
<b>Appendix II: The National Medicaid Fraud and Abuse Initiative’s Information Systems Workgroup Members .....</b>	<b>71</b>
<b>Appendix III: Text of the Questionnaire on States Systems Used to Detect Fraud and Abuse .....</b>	<b>72</b>

## **EXECUTIVE SUMMARY**

The Health Care Financing Administration (HCFA), which has been recently re-named the Centers for Medicare and Medicaid Services (CMS), is committed to partnering with States and other stakeholders in fighting fraud and abuse in the Medicaid program. During the month of May 2000, the National Medicaid Fraud and Abuse Initiative's Information Systems (IS) Workgroup distributed a questionnaire to all State Medicaid Agencies. The questionnaire requested basic information on the systems that States currently have, effective features of those systems, desired enhancements, and more generally, best practices in the States' Program Integrity (PI) and Surveillance and Utilization Review (SUR) operations. The information provided by the States has been consolidated and is presented in this Resource Guide.

Federal regulations require that State Medicaid Agencies have effective fraud and abuse detection processes. Over the years, States have relied primarily on the Surveillance and Utilization Review Subsystem (SURS) of their Medicaid Management Information Systems (MMIS) to help them identify potential fraud, waste and abuse. However, in hearings before Congress last year, some State officials testified that the systems they use for detecting fraud and abuse are antiquated, and are not effective in the prevention and detection of elaborate fraud and abuse schemes. In response to the States' concerns, a questionnaire was developed to obtain information that we believe will be useful to the States.

The Resource Guide of State Fraud and Abuse Systems is intended to be an easy reference tool for States to review, for example, the types of systems other States have, what fraud and abuse detection features are more popular and/or effective, and how their own systems compare with those of other States. The Guide will prove useful for States that are planning to enhance their existing systems; e.g., a State may find a number of States that have recently acquired enhancements similar to the ones that the State is planning to acquire. The State may consider contacting the other States for information and guidance. Similarly, for States that are merely thinking about how they might enhance their systems, this Guide will provide ideas and contacts whom they may call to discuss the advantages and disadvantages of various fraud and abuse detection features.

More generally, the Resource Guide of State Fraud and Abuse Systems is an attempt to provide our State partners with information on available automated systems that are being used to control Medicaid fraud, waste, and abuse. By identifying effective or innovative fraud and abuse detection mechanisms, by identifying the various vendors that provide these mechanisms, and by identifying the fraud and abuse detection features that either are being acquired by States or are on a State's wish list, the Resource Guide will assist States in their efforts to acquire better tools for fighting fraud and abuse in the Medicaid program.

### **Brief Description of the Questionnaire**

The questionnaire focused on five systems-related areas and a more general area on best practices. A brief description of each area is provided below.

## **Section I**

### **States' Existing Surveillance and Utilization Review Subsystems (SURS)**

States were asked to describe the Surveillance and Utilization Review Subsystems (SURS) that they currently use to help prevent or detect Medicaid fraud and abuse, and when those systems were acquired. States were also asked to identify some characteristics of their SURS, as well as if, when, and what enhancements were made to their existing systems. In addition, States were asked to identify the work units or positions that have online, real time access to their SURS or any other fraud and abuse detection system.

## **Section II**

### **SURS Enhancement Systems Used by the States**

This section focused in more detail on the systems or system components referenced in Section I that were acquired by States to enhance the overall performance of the SURS operation. These additions either became a part of the SURS, or operated more independently but as a supplement to the SURS. Examples of such systems include fraud and abuse detection systems, decision support systems, and ad hoc reporting systems. Other enhancements made to a State's SURS were also identified. States were also asked to provide brief explanations as to why these systems or enhancements were acquired.

## **Section III**

### **Features and Characteristics of the State Systems**

States outlined the features and characteristics of the systems they use to detect Medicaid fraud and abuse. For example, States were asked to identify automated tools or functions that their systems provided, including the capability of State systems to perform data queries, data mining, or statistically valid random sampling, to import and export data, and to process large data sets. States were also asked to describe filters/algorithms that have proven to be effective in detecting fraud and abuse.

## **Section IV**

### **Vendor Products/Services Used by the States**

A compilation of vendors, the products and services they provide, as well as the States that use them, is provided in this Guide. Also provided are brief descriptions furnished by the States of what they consider to be the strengths of the vendor products and services.

## **Section V**

### **Planned Replacements and/or Enhancements**

This section addressed planned upgrades to or replacement of existing systems. States identified the enhanced features or new systems being acquired, as well as the timeframe for acquisition. CMS also asked for wish lists from States that had no specific replacement or enhancement plans.

## **Section VI**

### **Innovative Data Collection and Reporting Methods/Best Practices**

States were given an opportunity to describe effective or innovative methods they have utilized in such areas as using existing information systems to detect patterns of fraud and abuse, and collecting and reporting data on fraud and abuse.

#### **Observations**

Summarized below are highlights of our observations, based on the information provided by the 47 States that submitted responses to our questionnaire.

- Forty-three of the 47 States identified the type of SURS that they were using in their efforts to detect and prevent fraud and abuse. The predominant types or versions of SURS in use are SURS II (in 14 States), RAMS II (in 8 States), and advanced SURS (in 7 States). Two States reported they are using client server (CS) based SURS systems, while one State is in the process of acquiring one. Two other States are using personal computer (PC) based SURS systems.
- Eleven States responded that SURS is the only system they used for fraud and abuse detection. Five States responded that they use a separate fraud and abuse detection system component in addition to SURS and eighteen States responded that they use a decision support system, along with SURS, for fraud and abuse detection.
- Of the 47 responses, 23 States reported that their systems have been enhanced since inception. Of these 23 States, 11 indicated that they made enhancements within the last five years (since 1995). Although the remaining 24 States responded that there were no enhancements made to their SURS, seven of these States had acquired new systems within the last five years (since 1995).
- In addition to the major vendors, such as Electronic Data Systems (EDS) and Consultec, which serve as MMIS fiscal agent contractors, the States identified a total of 34 different vendors that they use for various aspects of the fraud and abuse detection process.
- Thirty-one States indicated that they were planning to acquire enhancements to or replacements of their current systems. Most of these acquisitions were anticipated to take place within two to three years. The most popular upgraded features or new systems were: a replacement SURS (19 States), encounter data capabilities (14 States), FAD software (13 States), and a DSS (13 States).
- Of the States with no acquisition plans, eight States indicated that they would like to get data mining capabilities, eight States would like FAD software, and six States wanted a DSS with FAD capabilities.

A complete compilation of the information provided by States in response to our questionnaire is presented in the text of this document.

### **Inconsistencies**

As a cautionary note, it should be recognized that the information presented in this report is based on the States' responses to the questionnaire. For the most part, all of the information provided by the States has been incorporated into this report. There were a few instances where State responses to a particular question were either unclear or even contrary to information reported elsewhere in the questionnaire. For example in Section I of the questionnaire five states reported that they use a separate fraud and abuse detection system (FADS) component in addition to SURS and eighteen stated that they use a decision support system (DSS). However, in Section II only four States indicated that they use a separate FADS and only 14 stated that they use a DSS. Likewise, in response to a question pertaining to a wish list for States that had no acquisition plans, one State identified the same enhancements as those that it said it was planning to acquire. Since the State indicated time frames for its planned acquisitions, we did not incorporate the wish list response into the final report. In other instances, we edited some responses for the sake of clarity.

### **Note of Thanks**

We would like to take this opportunity to thank all the States who took the time to review and respond to the questionnaire. It is through your efforts and the information you provided that we were able to produce what we hope will be a valuable resource tool.

## A. BACKGROUND

In August 1997, CMS representatives met with representatives from 15 State Medicaid Agencies to discuss ways of improving the State/Federal partnership as it related to the detection and prevention of fraud and abuse within the Medicaid program. The group identified many issues, and agreed upon a number of major areas on which CMS's National Medicaid Fraud and Abuse Initiative (the Initiative) should focus its attention. One of these areas related to how information systems could be improved or better used by States in their efforts to control fraud and abuse. The systems in question are primarily the SURS within the States' MMIS, as well as any other systems that States may be using in conjunction with their MMIS, such as, DSS and FADS.

As part of the Initiative, an IS workgroup was established which consists of representatives from CMS Regional and Central Offices and State Medicaid Agencies. The workgroup recommended, among other things, that a Resource Guide of State Fraud and Abuse Systems be developed to provide States with information on available automated systems that could enable them to better control Medicaid fraud, waste and abuse. In order to accomplish this objective, the IS workgroup developed a questionnaire that was distributed to States in May 2000. The questionnaire requested basic information on the systems that States currently have, effective features of those systems, desired enhancements, and more generally, best practices in the States' Program Integrity (PI) and Surveillance and Utilization Review (SUR) operations.

We received responses to the questionnaire from 47 States. Arizona did not submit a completed questionnaire, advising CMS that because its MMIS was developed to address the needs of the statewide managed care (MC) program, the State's SURS equivalent system was largely used for utilization review and quality assurance (QA) purposes.

The States' responses to the questionnaire have been compiled and are presented in the six sections listed below. In reviewing the wealth of material provided, the reader should note that ***CMS does not endorse or give an opinion on the merits of any of the systems, products, or services identified by the States.*** If you are interested in obtaining additional information about a particular system or vendor's product/service, please contact the appropriate State representative from the list provided in Section E of this document. Also provided, in Section C, is a list of acronyms used in the Guide. Section D provides capsule definitions of key database tools and functions.

- Section I: States' Existing Surveillance and Utilization Review Subsystems (SURS)
- Section II: SURS Enhancement Systems Used by the States
- Section III: Features and Characteristics of the State Systems
- Section IV: Vendor Products/Services Used by the States
- Section V: Planned Replacements and/or Enhancements
- Section VI: Innovative Data Collection and Reporting Methods/Best Practices

## B. QUESTIONNAIRE RESPONSES

### Section I

### **States' Existing Surveillance and Utilization Review Subsystems (SURS)**

States were asked to describe the SURS that they currently use to help prevent or detect Medicaid fraud and abuse, and when those systems were acquired. States were also asked to identify some characteristics of their SURS, as well as if, when, and what enhancements were made to their existing systems. In addition, States were asked to identify the work units or positions that have online, real time access to their SURS or any other fraud and abuse detection system.

#### *Type of SURS*

Of the 47 States that responded, 43 States identified the type of SURS that they were using in their efforts to detect and prevent fraud and abuse. The predominant types or versions of SURS in use are SURS II (in 14 States), Retrospective Analysis Medical Services (RAMS) II (in 8 States), and advanced SURS (in 7 States). Two States reported they are using CS-based SURS systems, while one State is in the process of acquiring one. Two other States are using PC-based SURS systems.

The oldest systems are the SURS I and II, the advanced SURS, and the RAMS II systems. Although they date from the '80s, the advanced SURS, SURS II and RAMS II are the most common systems in use, and are similar in age and functionality. They are less flexible than the newer PC-based SURS or CS-based SURS, and tend to be hard coded. The PC-based SURS is the predecessor to the CS-based SURS, which is the newest and most flexible SURS in use today.

The following chart indicates the type, level, or version of a State's SURS currently in use and, in parentheses, the year in which they became operational.

*States	SURS I	SURS II	RAMS II	PC SURS	CS SURS	Advanced SURS	Other Systems
AL (1999)			X				
AK (1988)		X					
AR			X				
CA (1982)						X	
CO (1998)							SURS III
CT			X				
DE (1990)		X					
FL (1984)						X	

States	SURS I	SURS II	RAMS II	PC SURS	CS SURS	Advanced SURS	Other Systems
GA (1992)			X				
HI	X						
ID (1998)							
IL (1980)		X					
IN (1995)			X				
IA (1997)						X	
KS (1996)						X	
KY (1999)		X					
LA (1998)					X		
ME							Access DB
MD (1997)					X		
MA (1998)							SAS Based
MI (1995)				X			
MN (1994)						X	
MS (1991)		X					
MO (1994)						X	
MT		X					
NE (1979)	X						
NV							
NH (1994)			X				
NJ (1992)		X					
NM		X					
NY (1970)						X	
NC (1999)							Omni Alert
OH		X					
OK (1994)				X			
OR (1980)		X					
PA (1981)		X					
RI (1993)	X						
SC					Under Development		
SD (1980)	X						
TN		X					
TX (1980)			X				MFADS ('97)
UT (1980)		X					
VA (1987)		X					
WA (1997)							SURS
WI (1981)			X				
WV (1997)							DSS/SURS
WY (2000)							Omni Alert

\*Only States that responded to the questions are reflected in the chart above.

**Breakout of the Responses:**

SURS I	4
SURS II	14
RAMS II	8
PC SURS	2
CS SURS	2 (third system is under development)
Advanced SURS	7
No SURS Identified	4**
Other Systems	8***

\*\* Four States (Idaho, Maine, Massachusetts, and Nevada) did not identify the type of SURS they are using. Idaho reported that its system was acquired in January 1998. Nevada reported that it does not have a SURS/MMIS system, but is planning to have an operational SURS/MMIS by April 2004.

\*\*\* Maine and Massachusetts did not identify the type of SURS that they are using, but did indicate that they are using, respectively, an Access database system and a Statistical Analysis Systems (SAS) based system. Texas reported that, in addition to a RAMS II system, it uses another system called Medicaid Fraud and Abuse Detection Systems (MFADS).

**Characteristics of State SURS**

As listed below, the States were asked to identify specific characteristics of their SURS:

- ◆ Fiscal Agent’s Proprietary System (Fiscal Agent’s)
- ◆ Designed by Vendor
- ◆ Designed by State
- ◆ Operated by Vendor
- ◆ Operated by State
- ◆ Used with Fee-For-Service (FFS) data (used for FFS)
- ◆ Used for Managed Care (tracking encounter data) (Used for MC)
- ◆ Only used for Fraud and Abuse Detection (Only FAD)
- ◆ Used with a separate Fraud and Abuse Detection System component of the MMIS (Sep. FADS)
- ◆ Used with a Decision Support System for Fraud and Abuse Detection (Used w/ DSS)

*States	Fiscal Agent's	Designed by Vendor	Designed by State	Operated by Vendor	Operated by State	Used for FFS	Used for MC	Only FAD	Sep. FADS	Used w/ DSS
AL	X	X			X	X	X			X
AK		X		X		X				X
AR										
CA		X	X	X	X				X	
CO		X		X		X				X
CT	X	X		X		X				
DE	X	X		X		X		X		
FL	X	X							X	X
GA				X		X				X
HI			X			X		X		
ID	X				X					
IL					X					
IN		X		X						X
IA		X				X				X
KS				X		X	X			X
KY	X	X		X						
LA		X		X		X		X		X
ME			X		X	X				X
MD		X			X	X	X			X
MA			X		X	X				
MI		X		X		X				
MN		X			X	X		X	X	
MS		X		X						X
MO				X		X				

States	Fiscal Agent's	Designed by Vendor	Designed by State	Operated by Vendor	Operated by State	Used for FFS	Used for MC	Only FAD	Sep. FADS	Used w/ DSS
MT		X		X		X		X		
NE		X			X					X
NH		X	X	X		X				
NJ				X	X	X				
NM		X		X		X		X		
NY			X	X		X				
NC		X			X	X	X		X	X
OH		X			X					
OK	X			X		X	X			X
OR					X	X		X		
PA		X			X	X		X		
RI	X	X		X		X	X			
SC		X			X	X		X		
SD			X		X	X	X			
TN		X		X		X				
TX		X	X	X			X		X	
UT			X		X	X		X		
VA				X		X	X			
WA		X		X	X	X				
WI	X		X	X		X		X		X
WV		X	X	X						X
WY		X	X	X	X					X

\*Only States that responded to the questions are reflected in the chart above.

**Breakout of the Responses:**

Number of States Responding = 47

Fiscal Agent's	9	Used with FFS	33
Designed by Vendor	29	Used for MC	9
Designed by State	12	Only FAD	11
Operated by Vendor	27	Sep. FADS	5
Operated by State	19	Used w/ DSS	18

The responses show that a majority of States use surveillance and utilization review subsystems designed and operated by private vendors. In addition, most States' SURS appear geared to their fee-for-service Medicaid programs.

<b><i>Enhancements Made to State SURS</i></b>
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States were asked if their existing SURS had been enhanced, and if so, what enhancements were made and when.

Of the 47 responses, 23 States reported that their systems have been enhanced since inception. Of these 23 States, 11 indicated that they made enhancements within the last five years (since 1995).

<b><u>*States</u></b>	<b><u>Year</u></b>	<b><u>Enhancements Made</u></b>
AK	1994	Added prescriber information, adjusted various components and criteria, and enhanced program flexibility.
AL	1999	The State acquired the Arkansas RAMS II base SUR profiler with Idaho Graphical User Interface (GUI). Also, the State has Codman Practiscan/Pandora, Map Info, and SPSS, and will be getting the GMIS claim check in the next year.
CA	1994	Provider Early Warning System (PEWS) and Provider Trend Analysis (PTA)
CT	2000	To run monthly reports instead of quarterly reports, increase number of lines, and increase category of service (COS).
FL	1988	Added physician referral
HI	1994	Focus reporting
IL	1990	COPE inquiries: new reports produced, files created from quarterly summary records and put on NOMAD
LA	1998	System configured by vendor to match Louisiana Payment System
MD	1997	A complete new system as part of a New MMIS II.
MI	1995	On-line, ad hoc reporting utilizing a relational database and five-year claim history.
MO	1994	Provision for users to specify parameter control of the data reduction and summary profile process plus a provision of continued "hard coding" for routinely used logic. Extensive capability was included for selecting and printing only the specific claims required by user and for arraying the claims in a desired sequence. A random claim sampling capability was added to improve the auditing process. The data acquisition process is designed to utilize the data collection system provided by the data from paid claims, provider enrollment and recipient eligibility.

<u>States</u>	<u>Year</u>	<u>Enhancements Made</u>
NE	1990	On-line parameter controls
NY	1998	Ability to process claims every 30 days and produce highly customized, user friendly reports, which allow the medical reviewers to quickly scan each case. A few examples include the Provider Summary System, Surge Reports and Abused Code Reports.
OH	1996	Upgraded profiling capabilities
OK	1998	Episode of Care (EOC), multiple displays, auto-purge of reports, additional application server, and remote access.
PA	No Response	Efficiency measures for entering on-line data into quarterly production file, corrected problems with referral processing to include various types of claims, and added the ability to collect diagnostic related group (DRG) data.
SC	No Response	The system will come with all enhancements since its development.
TN	1984	Treatment analysis portion of RAMS was added to SURS II processing
TX	1997	A separate, stand-alone system based on neural network and learning technology. This includes a two-terabyte platform, datamarts, data mining tools, ad hoc reporting capabilities, and PC-based user tools.
WA	1984	Claim history expanded from 15 to 36 months
WV	2000	Redesigned and installed to State specifications in 1997-98. In addition, developed advance filters capability to produce smaller, targeted data sets.
WI	1988	Added specific drug monitoring reports, which enhances weighting and ranking by adding low and high threshold definitions per line and increased extract codes from 20 to over 125. In addition to the SURS RAMS II system, the State designed audit tools are used for extracting data from the DSS. These are rule based and have a statistical method built into the tool. The State also uses an application that monitors and tracks audits in progress and recoveries.
WY	2000	Omni alert

\*Only States that responded to the questions are reflected above.

Although 24 States reported that no enhancements had been made to their SURS, it should be noted that the following seven States acquired a new system within the last five years (since 1995):

- Colorado (1998)
- Indiana (1995)
- Iowa (1997)
- Kansas (1996)
- Kentucky (1999)
- Massachusetts (1998)
- North Carolina (1999)

<i>Access to SUR or FAD Systems</i>
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Thirty-one States responded to a question, which asked what work units or positions have direct on-line or real time access to their SUR or FAD systems. The responses are broken out in the chart below.

*States	SURS Unit	Program Integrity	**MFCU	***Rate Setting	Internal Auditors	External Auditors	Fiscal Office	**Case Mix	**Medical Quality
AL	X	X	X						
AK	X						X		
CA	X							X	X
CO		X	X	X					
GA	X	X		X	X	X	X		X
ID	X								
IN	X	X	X		X			X	
KS	X	X	X	X			X	X	X
KY	X	X					X		
LA	X	X							
ME	X								
MD	X								
MI	X	X		X			X	X	X
MN	X								
MS	X								
NE	X								
NH							X		
NC	X	X	X						
OK	X								
OR		X	X						
PA	X								
RI	X	X							
SC	X	X			X				

States	SURS Unit	Program Integrity	**MFCU	***Rate Setting	Internal Auditors	External Auditors	Fiscal Office	**Case Mix	**Medical Quality
SD	X	X	X	X					
TX	X	X	X						
WA	X								
WI		X			X				
WV	X		X						
WY	X	X	X	X			X	X	X

\*Only States that responded to the questions are reflected in the chart above.

\*\*MFCU Medicaid Fraud Control Unit

\*\*\*Refers to Rate Setting and Reimbursement staff, Case Mix Medical Review staff and Medical Quality Control staff

**Breakout of the Responses:**

Number of States Responding = 31

SURS Unit	25
Program Integrity	16
MFCU	10
Rate Setting	6
Internal Auditors	4
External Auditors	1
Fiscal Office	7
Case Mix	5
Medical Quality	5

**Others:**

- IA Programmers
- OR Information systems personnel
- RI Systems engineer for SURS
- SC MMIS user services, Third Party Liability (TPL), and Bureau IS
- TX Researchers and other systems analysts assigned
- VA First Health Services Corp. (fiscal agent)

The responses show that while over 90 percent of the responding States provide their Surveillance and Utilization Review or Program Integrity staff with direct access to SUR and FAD systems, only about one-third of the States give comparable access to the Medicaid Fraud Control Units, which are located outside the State Medicaid Agencies.

## Section II

### **SURS Enhancement Systems Used by the States**

This section focused in more detail on the systems or system components referenced in Section I that were acquired by States to enhance the overall performance of the SURS operation. These additions either became a part of the SURS, or operated more independently but as a supplement to the SURS. Examples of such systems include fraud and abuse detection systems, decision support systems, and ad hoc reporting systems. Other enhancements made to a State's SURS were also identified. States were also asked to provide brief explanations as to why these systems or enhancements were acquired.

#### ***SURS Enhancement Systems***

The following chart identifies the various SURS enhancement systems or system components being used by the States:

<b>*States</b>	<b>Fraud and Abuse Detection System</b>	<b>**Decision Support System</b>	<b>Ad Hoc Reporting</b>	<b>Others</b>
AL		<b>X</b>	<b>X</b>	Auto Track XP online; Alpha II by Unicore Medical Inc.
AK		<b>X</b>	<b>X</b>	
AR		<b>X</b>		
CA			<b>X</b>	PEWS, PTA, Scenario Engine
CO		<b>X</b>	<b>X</b>	
CT			<b>X</b>	
FL		<b>X</b>		
GA				DSS w/o enhanced FAD software and Auto Audit
HI			<b>X</b>	
IN		<b>X</b>		Data probe
IA		<b>X</b>		
KS		<b>X</b>	<b>X</b>	
KY				Contract with company to identify fraud and abuse
LA		<b>X</b>		
MD			<b>X</b>	Peer groups (standard SURS reports)
MA			<b>X</b>	
MI			<b>X</b>	
MN				Data Warehouse
MS		<b>X</b>	<b>X</b>	
MO		<b>X</b>	<b>X</b>	
MT			<b>X</b>	
NE			<b>X</b>	

*States	Fraud and Abuse Detection System	**Decision Support System	Ad Hoc Reporting	Others
NH			X	
NJ			X	
NM			X	
NY			X	FAMS
NC	X	X	X	
OH			X	SAS Reporting
OK			X	
OR		X		
RI			X	Business objects
SC	X		X	
SD			X	
TX	X		X	
UT			X	
WA	X			
WI			X	
WV			X	
WY		X	X	Omni Alert

\*Only States that responded to the questions are reflected in the chart above.

\*\*Refers to Decision Support Systems plus enhanced fraud and abuse software.

**Breakout of the Responses:**

Number of States Responding = 39

Fraud and Abuse Detection Systems	4
Decision Support System	14
Ad Hoc Reporting	29
Other Systems	11

## *Reasons of Acquiring Enhancement Systems*

The next chart presents the reasons for acquiring the SURS enhancement systems noted above. Included in the chart are answers to the following questions, posed in the questionnaire, which 34 States provided:

- What is the vendor's name?
- Why was this particular system selected?
- How long has the system been in use?
- What factors influenced the decision to use this system?

*States	Vendors	Why did you select?	How long?	What factors?
AL	1. EDS – decision support system and RAMS II profiler 2. Data Base Technology, Inc. -- Auto Track XP 3. Unicore Medical Inc. – Alpha II	It fit our needs.	DSS and Alpha II since 1999; Auto Track XP since 2000	The Arkansas/Idaho SURS RAMS II system was the EDS MMIS system that was bid. It has been certified in other States. So, it is "proven".
AK	First Health Services Corp. (FHSC)/VIPS	It is flexible, it has desktop availability and all staff can utilize it.	5 years	It is user friendly, it has technical support and it is a flexible program.
AR	EDS	No Response	No Response	No Response
CA	EDS	Based on the MMIS evaluation of proposal in response to Request For Proposal (RFP).	Over 20 yrs	The RFP included claims processing and MMIS.
CO	Consultec; VIPS/Service Tracking Analysis Reporting Systems (STARS)	The SURS was part of the new MMIS system that was implemented in December of 1998.	12/98	It was one of the subsystems within the MMIS.
FL	Consultec	The State selected ITN via the State procurement process.	6/99	The system is flexible, vendor has Medicaid experience, and price.
GA	1. MedStat Group 2. Auto Audit	1. In GA's opinion, it was the best available as a result of competitive procurement at the time of purchase; and 2. To enhance the MMIS claim adjudication to improve F&A detection upfront. Auto Audit is used specifically for the detection of bundling and unbundling of codes and other potentially fraudulent billing practices.	1. 3 years 2. 3 years	1. The existing limitations of the current MMIS do not allow data manipulation, and 2. the need for enhanced MMIS claims editing and auditing.

States	Vendors	Why did you select?	How long?	What factors?
IN	1. Hummingbird Ltd 2. MedStat Inc.	It has speed for pulling pre-cleaned data, and ease of design.	January 1995	No Response
IA	VIPS STARS	It is part of the fiscal agent's contract. Consultec sub-contracted.	7/1/97	No Response
KS	VIPS	It was proposed as part of MMIS reprocurement, used by Medicare intermediary – Blue Cross Blue Shield (BCBS) of Kansas who won the MMIS contract.	11/96	It is easier and offers quicker access to claim data.
KY	Sapient/Healthwatch	Bid	2/1/99	Cost, production and return
LA	Medstat	The DSS was simply available	2000	Availability
MD	UPI Government Group, LLC	The system satisfies current MMIS II 1997 certification mandates. The system also benefits Maryland by achieving significant user conveniences and savings, and reduction in ADC machine time and costs. In addition, it provides data for FFS and encounter data reports.	3 yrs, 6 mons	The CS-based SURS provides flexibility and timelines of reporting in a very cost-effective way to provide total Medicaid utilization review and reporting. CS-based SURS supports the needs of a wide range of users, including utilization and quality assurance administrators, policy analysts, planning and program evaluation staff, and all levels of program management and managed care programs.
MI	BULL Information Systems	It has on-line, ad hoc reporting, It has user friendly software, it has data availability at claim line level and it has aggregated data in SURS profile reports.	1995	It has on-line, ad hoc reporting, it has user friendly software, it has data availability at claim line level and it has aggregated data in SURS profile reports.
MN	BULL	No Response	1997	No Response
MS	EDS	In MS' opinion, SURS II provided the best utilization review sub-system that was available in 1991.	9 years	SURS II was the subsystem used by the fiscal agent who won the contract.
MO	Medstat	The vendor was awarded the contract.	4 months	It offered the best prices and skills.
NE	Medstat	System was selected primarily to support managed care program and encounter data.	5 years	It was the only system available to SURS that has access to managed care encounter data.

States	Vendors	Why did you select?	How long?	What factors?
NV	University of Nevada, Las Vegas under a contract, supplies statistical data on Medicaid. Special reports can be requested by SURS.	The contact was already in place.	2 years	Availability
NH	EDS	The State's current ad hoc reporting system was implemented as a feature within our overall MMIS. Prospective vendors of the NH MMIS were required to include such a reporting feature in their proposal. EDS was awarded the contract that includes our current ad hoc reporting capabilities.	6 years	The contract was based on vendor experience, financial background, historical performance and ultimately technical and cost components.
NJ	Unisys	Fiscal Agent Contractor	4 years	Ad Hoc reporting allowing the State to identify trends and patterns either: a) prior to payments being made, or b) just shortly after payments have been made. With experienced staff dedicated solely to this function, the State has determined that it can "stop the bleeding" more effectively by utilizing the models that it has developed through experience.
NM	Consultec	It is part of fiscal agent contract. Data warehouse makes it efficient.	5 years	It is flexible, accurate and has a short turn around time to get data.
NY	IBM	The system provides a number of algorithms to measure provider's behavior. This allows for profiling of all provider types and offers a number of tools for reporting and displaying results.	2 years	The availability, ease of use, flexibility of the product, customization by the vendor to meet NYSDOH needs and vendor support.
NC	1. ITC (Spotlight) 2. Consultec (Omni Alert)	In NC's opinion, it offered the best value procurement to provide FADS & SURS capabilities and ad hoc reporting.	FADS 4/00, DSS 7/00 and ad hoc reporting 1998	The price, value, company fraud detection experience, and neural net technology.

States	Vendors	Why did you select?	How long?	What factors?
OK	Unisys	The system provides multiple control files, easy maintenance, greatly reduced run time for reporting, and the ability to modify report specification. It has the capability to rerun reports and have results in 2 to 2 1/2 hours.	6 years	It is PC-based, and it has the ability to complete standard SURS reporting in 4 to 6 hours instead of 4 to 6 weeks. It is no longer limited to producing reports only on a quarterly basis. Also, it is fast, easy to maintain and has the ability to run multiple jobs simultaneously.
OR	The State is in the process of choosing a new vendor.	It will be selected by end of 2000.	No Response	The current system is archaic and losing functionality.
RI	EDS	It has easy retrieval of information, it is user friendly, and the vendor is familiar with the needs of the department.	1 year	It is compatible with the MMIS, it uses common language, and cost.
SC	UPI Government Group	The vendor was selected through a competitive procurement process. It met most of the State needs for a client/server PC-based SURS.	In development	The vendor met the technical components and needs outlined in the RFP.
TX	1. National Heritage Insurance Company (NHIC) - SURS & Ad Hoc 2. EDS – MFADS	These systems represented the best value for the State of Texas, both as to capabilities and cost.	The MFADS since 12/30/97, the ad hoc query platform since February 1999, and the SURS for over 20 years.	The acquisition of a MFADS was to select a vendor whose offer would result in the overall best value. The objectives for the system are as follows: <u>Most Important</u> – MFADS development results in a user-friendly system that can identify potential cases of Medicaid provider or recipient fraud, waste or abuse. The system will also support investigations, identify overpayments relating to fraud, waste or abuse, and allows the State to project overpayments into the payment universe. <u>Second Most Important</u> – Integration of all Medicaid data into a single MFADS to allow investigation of cases with information that crosses over program lines. Initially the system integrated eight databases. This has now been expanded. <u>Third Most Important</u> – Cost and best value to the State. <u>Fourth Most Important</u> – Ability to identify additional front-end claims processing audits and controls, and monitor the performance of the claims administrator.

States	Vendors	Why did you select?	How long?	What factors?
UT	Unix System for Claim History Reporting	It was the only option available at the time.	Approx. 10 years	Availability
WA	No Response	Competitive procurement – best cost/technical score.	It is not yet operational.	The vendor met the competitive procurement in best cost/technical score.
WV	Consultec	It was the successful bidder for RFP specifications.	No Response	No Response
WI	EDS	It was specifically built to meet Wisconsin's aggressive fraud and abuse detection goals.	1997	It is specific to Wisconsin Medicaid benefits. It is flexible and can be changed or modified as circumstances change or new issues warrant monitoring or evaluation. Information retrieval was fast via an easy process.
WY	Consultec	It provides additional capabilities, it is flexible and it has timeless factors- unlimited options.	2 months.	It provides more up to date information than exception review index (ERI), and drill down capabilities.

\*Only States that responded to the questions are reflected in the chart above.

## Section III

### **Features and Characteristics of the State Systems**

In Section III of the questionnaire, States outlined the features and characteristics of the systems they use to detect Medicaid fraud and abuse. For example, States were asked to identify automated tools or functions that their systems provided, including the capability of State systems to perform data queries, data mining, or statistically valid random sampling (SVRS), to import and export data, and to process large data sets. States were also asked to describe filters/algorithms that have proven to be effective in detecting fraud and abuse. See Section D for short definitions of the tools and functions listed in this section.

A total of 46 States in all provided responses to this section, as presented in the charts below. The first chart is divided into two parts for reasons of space. It identifies the tools and functions which states systems use in the fraud and abuse detection efforts. It also indicates whether such tools and functions are available as part of the State MMIS or used as part of a separate DSS.

#### *Automated Tools or Functions Used in Detecting Fraud and Abuse*

#### (Part 1)

*States	Automated Tools/Functions								
Used with the MMIS	Used with the DSS	Query Tools	Data Mining	Enterprise Reporting	Visualization	Auditing	Model/Scenario Building	Geographic Presentation	
AL	X	X	X	X			X	X	
AK	X	X	X	X		X		X	
AR	X	X	X	X		X		X	
CA	X		X			X		X	
CO	X	X	X	X	X	X		X	
DE	X								
FL	X	X	X						
GA	X	X	X	X	X	X	X	X	
HI	X			X					
ID									
IL	X								
IN		X	X	X					
IA	X	X	X			X			
KS	X	X	X		X		X	X	
KY			X			X			
LA	X	X	X	X	X		X	X	
ME		X	X						

*States	Automated Tools/Functions								
	Used with the MMIS	Used with the DSS	Query Tools	Data Mining	Enterprise Reporting	Visualization	Auditing	Model/Scenario Building	Geographic Presentation
MD	X		X	X					
MA									
MI			X				X		
MN	X		X	X			X		
MS	X	X			X		X		
MO									
MT	X								
NE	X	X							
NH	X								
NJ	X		X	X			X	X	
NV			X						
NM	X								
NY	X	X	X	X	X	X	X	X	
NC		X	X	X		X		X	
OH	X		X				X		
OK	X	X	X			X	X	X	
OR									
PA	X						X		
RI	X		X						
SC			X				X		X
SD	X		X						
TN			X				X		
TX	X	X	X	X	X	X		X	
UT	X						X		
VA									
WA			X	X		X		X	X
WI	X	X	X				X		
WV			X	X					
WY	X	X	X	X		X	X		X

\*Only States that responded to the questions are reflected in the chart above.

***Automated Tools or Functions Used in Detecting Fraud and Abuse -- continued***

**(Part 2)**

*States	Additional Automated Tools/Functions					
	Trend analysis and/or Forecasting	Data and/or Statistical Analysis	Decision Support Tools	Electronic Data Interchange or Commerce	Record/Case Tracking and Management	Other
AL	X	X	X			
AK	X	X	X	X	X	Frequency Distribution
AR	X	X	X	X	X	
CA	X					
CO	X	X	X		X	
DE						
FL	X	X	X			
GA	X	X	X	X	X	
HI		X				
ID		X				Peer Group Reporting
IL		X				
IN		X	X			
IA	X	X	X			
KS	X	X	X			
KY			X			
LA	X	X	X	X		Ad Hoc Reporting
ME						
MD		X	X			Episode of Care Analysis
MA		X				
MI		X			X	
MN		X				
MS	X	X			X	
MO	X	X	X			
MT		X				
NE						
NH						GQL Ad Hoc
NJ	X	X				
NV	X	X			X	
NM						
NY	X	X	X	X	X	
NC	X	X	X		X	
OH		X				Provider Profiling

*States	Additional Automated Tools/Functions					
	Trend analysis and/or Forecasting	Data and/or Statistical Analysis	Decision Support Tools	Electronic Data Interchange or Commerce	Record/Case Tracking and Management	Other
OK	X	X	X			
OR	X					
PA		X				
RI		X			X	
SC		X	X		X	
SD	X	X				
TN		X	X			
TX	X	X	X	X	X	
UT	X	X				
VA		X				
WA			X		X	
WI			X		X	
WV	X	X				
WY	X	X	X		X	

\*Only States that responded to the questions are reflected in the chart above.

The responses suggest that while most State systems have the ability to do various forms of data, trend and/or statistical analysis, electronic data exchange and enterprise reporting remain relatively rare.

**Breakout of the Responses:**

Number of States Responding = 46

Query Tools	31
Data Mining	17
Enterprise Reporting	5
Visualization	10
Auditing	20
Used with the MMIS	31
Used with the DSS	19
Model/Scenario Building	10
Geographic Presentation	11
Trend Analysis and/or Forecasting	23
Data and/or Statistical Analysis	36
Decision Support Tools	22
Electronic Data Interchange or Commerce	6
Record/Case Tracking and Management	15
Other	6

### Data Query Capabilities

The questionnaire also asked States whose systems have the capability to perform data queries to identify specific features of their data query process. The 35 responses received are presented in the following chart.

*States	Ability to develop and run ad hoc queries	Schedule queries to run in the background	Schedule queries for non-peak hours	Queries may be run individually or in batch mode	Other
AL	X	X	X	X	
AK	X	X	X	X	
AR	X	X	X	X	
CA	X		X	X	
CO	X	X	X		
FL	X	X	X	X	
GA	X	X	X	X	
HI	X			X	
IN	X	X	X	X	
IA	X		X		
KS	X	X	X	X	
KY	X		X		
LA	X	X	X	X	
ME	X				
MD	X	X	X	X	
MA	X				
MI	X	X			
MN	X				
MO	X	X	X	X	
NH	X	X	X	X	
NJ	X	X	X	X	
NY	X	X	X	X	Allow many different query tools to be used to interrogate the database.
NC	X	X	X	X	
OH			X		SAS query ability
OK	X	X			Ability to modify queries with minimal effort and has the ability to run up to 3 jobs simultaneously.
RI	X	X	X		
SC	X	X	X	X	
SD	X	X	X		
TN	X			X	
TX	X		X	X	Ability to develop and run within a few minutes very specialized, user defined queries and mini-reports.

States	Ability to develop and run ad hoc queries	Schedule queries to run in the background	Schedule queries for non-peak hours	Queries may be run individually or in batch mode	Other
UT	X				
WA	X	X	X	X	
WI	X	X	X	X	
WV	X	X	X	X	
WY	X	X	X	X	

\*Only States that responded to the questions are reflected in the chart above.

## Data Mining Capabilities

For States whose systems have the capability to perform data mining, the questionnaire went on to ask which of the following data mining functions could be performed:

- ♦ Suites (accomplishes multiple discovery tasks simultaneously)
- ♦ Classification (predicts an item class based on historical data)
- ♦ Clustering (finds groups or related items)
- ♦ Estimation (estimates continuous values)
- ♦ Link Analysis (finds links or dependencies)
- ♦ Visualization (visual) (interfaces data and dimensions)
- ♦ Text Mining (predicts values of continuous variables)
- ♦ Summarization (summary)
- ♦ Dimensional Analysis (provides access to legacy and relational data)
- ♦ Statistical Analysis

*States	Suites	Classification	Clustering	Estimation	Link Analysis	Visual.	Text Mining	Summary	Dimensional Analysis	Statistical Analysis
AL			X	X			X	X		X
AK	X							X		X
AR					X			X	X	X
CA		X	X					X		
CO			X		X	X		X	X	X
FL										X
GA		X		X	X			X	X	X
HI		X	X					X		X
IN		X								X
LA	X	X	X	X	X	X	X	X	X	X
MD	X	X	X		X			X	X	X
MN							X	X		X
MO										X
NJ								X	X	X
NY	X	X	X			X		X	X	X
NC			X			X				X
OR		X	X					X		X
TX	X	X	X	X	X	X	X	X	X	
WV										X
WY			X					X		X

\*Only States that responded to the question s are reflected in the chart above.

While most respondents had systems capable of statistical analysis and data summary functions, more sophisticated search and predictive capabilities still appear to be relatively uncommon.

**Breakout of the Responses:**

Number of States Responding = 20

Suites	5
Classification	9
Clustering	11
Estimation	4
Link Analysis	6
Visualization	5
Text Mining	4
Summarization	15
Dimensional Analysis	8
Statistical Analysis	18

<b><i>Statistically Valid Random Sampling (SVRS)</i></b>
--

States whose systems support Statistically Valid Random Sampling (SVRS) were asked to describe how SVRS is being used. The answers of the 24 States which responded to this question are given below:

**\*States**

**How is SVRS used?**

AL	It is used primarily for extrapolation.
AK	Recipient explanation of medical benefits (REOMB) distribution and occasional surveys (via MMIS/SURS), and claims sampling (via STARS).
CA	To produce samples for auditing and verification of services.
CO	It is used for overly large unwieldy data. SVRS provides an overview of all services billed by Medicaid providers.
FL	The system is in final acceptance testing stage.
GA	Although not supported by current MMIS SURS system, the State manually generates a SVRS by utilizing an internally created Access database. This is used for extrapolation of results.
IL	It supports the program integrity efforts.
IN	It is used to select a workable sample size of claims for review.
KS	It is used for reviewing large numbers of claims and for payment accuracy review.
KY	It is used to produce REOMB samples, contract monitoring samples, and hospital claim samples.
LA	It is used when a nurse analyst asks for a beneficiary sample.
MD	All claim details can be ordered using SVRS.
MA	The system selects the sampling, either randomly or stratified, based on the number of members to be reviewed per provider. Once an overpayment is determined, the actual overpayment amount is extrapolated for the entire review time period.
MI	It assists the providers audit department.
MO	In the SURS Audit Management Report, we can select a random sample that is normally used for a 25% random sample for a specific provider. State regulations allow for the extrapolation of findings for this type of sample with a minimum universe of 100 claims or line items.

States

How is SVRS used?

NH	One specific SURS report has this capability, which has been used to determine recovery dollar amounts in cases against providers with a large volume of claims over an extended period of time.
NJ	The State chooses the providers for review, and the system generates EOMBs to beneficiaries from a random selection of claims. "Hits" are referred for appropriate action.
NY	These are used in provider SURS reviews to identify potentially aberrant billing patterns and to evaluate known aberrant billing practices.
NC	The MFCU prefers using existing SURS for reasons of consistency. The State will evaluate Spotlights during SFY 2000.
OH	For audit samples
OK	User specifies a number or percentage of recipients/claims to be selected and entered these into the system. The system selects the specified number or percentage of claims or recipients from the universe and builds the reports.
TX	The State is in the process of developing protocols and providing training to system users that will allow the use of SVRS.
WI	It is used for selection of recipient samples for certain provider audits.
WY	It is used for reviews of all types.

\*Only States that responded to the questions are reflected above.

***Ability to Import and Export Data***

The following two charts (**Import Data From:** and **Export Data To:**) list the applications from which State systems may import data and those to which State systems data may be exported.

**Import Data From:**

*States	Spreadsheet	Database	Word Processor	Scanner	Other Imports
AL	X	X	X	X	
AK	X	X	X	X	
AR	X		X		
CA					CICS mainframe screen for entry system and telephone/fax request for scenario engine.
CO	X	X	X		
FL	X	X	X		Text files
GA	X	X			
KY	X	X	X	X	
ME					DSS
MD		X			
MI	X	X	X		
MN	X	X	X		Legacy OLPT systems
MO	X				
NJ	X	X	X	X	Other Mainframes
NV	X	X	X		
NY	X	X	X		Text and flat files
NC		X			Omni Alert can add any PC based file from a virtual folder.
OH					Ad Hoc SAS reports
OK					SAR (mainframe storage and retrieval)
OR	X				
RI		X			
SC					MMIS (IDMS database)
SD		X			
TN	X	X			
TX	X	X	X	X	
WV	X	X			
WI	X	X			
WY	X	X			

\*Only States that responded to the questions are reflected in the chart above.

**Breakout of the Responses:**

Number of the States Responding = 28

Spreadsheet	19	Scanner	5
Database	20	Other Imports	10
Word Processor	12		

**Export Data To:**

States	Spreadsheet	Database	Word Processor	Other Exports
AL	X	X	X	
AK	X	X	X	
AR	X		X	
CA				Electronic transfer of fixed, block or logical length flat files.
CO	X	X	X	
CT				Export reports only to text files, no data
FL	X	X		Text files
GA	X	X	X	
ID	X	X		
IN	X	X	X	
IA	X			
KS	X	X	X	
KY	X	X	X	
LA	X	X	X	
MD		X		
MA	X			
MI	X	X	X	
MN	X	X	X	Other databases
MO	X		X	
NJ	X	X	X	
NV	X	X	X	
NY	X	X	X	Text and flat files
NC	X	X		
OK	X	X	X	
RI	X		X	Ad hoc reporting
SC			X	
SD	X	X		
TN	X	X		
TX	X	X	X	
WI	X	X		
WV	X	X		
WY	X	X	X	

\*Only States that responded to the questions are reflected in the chart above.

In general, the data export capabilities of State systems appear somewhat more developed than their data import capacity.

**Breakout of the Responses:**

Number of States Responding = 32

Spreadsheet	28	Word Processor	20
Database	24	Other Exports	6

***Ability to Process Large Data Sets***

States whose systems are able to handle large data sets were also asked to identify the largest data set that their systems could process. The answers of the 35 States which responded are presented in the chart below.

Megabytes	KY	MA	ME	NE	SD	UT	WV								
Gigabytes	AL	AR	CO	GA	HI	LA	MD	MI	MN	NJ	NY	OH	OK	SC	TN
Terabytes	AK	CA	FL	IN	MO	NC	PA	RI	TX	WI	WY				

**Other Responses:**

MT No limitation/Mainframe

WA Legacy system uses IBM mainframe disk pack storage, so data size is not an issue.

The responses indicate that a majority of all States at present (at least 28 or 56 percent) have the capacity to deal with data sets on a gigabyte scale or greater.

***Effective Fraud and Abuse Detection Filters/Algorithms***

In the last part of this section of the questionnaire, States were asked to describe those data filters or algorithms that have proven to be most effective in their fraud and abuse detection efforts. The narrative responses of the 16 States that provided answers are listed below

**\*States**

**Filters/Algorithms**

- AK MMIS checks for duplicate claims, mutually exclusive coding disallowance, service limits, etc. The prepayment review capability cost avoids, saving program payments for improper claims.
- CA The State uses “rule-based” [formulas] known as measurement items.
- CO The State uses ERI and summary profile reports. These reports are used to identify aberrant providers and clients, as well as specific areas of exceptions.
- FL Florida is currently evaluating proposals for a fraud and abuse detection system.
- IN The State uses multiple algorithm lines to identify deviations from the norm, and then calculates weights, frequency, and/or utilization of various claims codes. This is one of our most effective [tools].
- KY The filters/algorithms are used to unbundle claims and look for duplicate billings.
- LA Those designed by the State or by other State Medicaid Agencies, which use the same system.

States

Filters/Algorithms

MD	Combination of data selection and exception criteria equals algorithms, of which the State has hundreds. Example: Requesting all recipients who have both medical day care and day habilitation on the same day.
MI	The State considers the SURS as a tool to identify fraud and abuse. Producing reports in the episodic mode has increased the number of fraud/abuse cases.
MT	Exception processing and ranking
NJ	Statistical exception in procedure coding or provider types or COS.
NY	There are 1200 measures, all of which are considered algorithms. The State uses a combination of these to model and profile providers and patterns of fraud and abuse. Some of our models included 80-100 algorithms.
NC	FADS currently in progress. Information will be available at a later date.
PA	The filters/algorithms are only those associated with SURS II programming.
TX	The State has found that neural networks are very effective in recognizing patterns through learning. Neural networks enable the system to anticipate and identify new fraud and abuse schemes. Targeted detection queries (TQs) (algorithms) are developed by subject matter experts and are very effective in identifying suspicious and aberrant patterns where investigative resources should be targeted. TQs do have limitations in that the subject matter experts must either have experience or knowledge of the fraudulent or abusive pattern. Neural models, particularly unsupervised models, do not need this input. TQs have made possible the recovery of large overpayments, and they have also identified fraudulent and other inappropriate claims payment. The State has also developed neural models to assist in identifying new and/or unknown patterns/schemes. The neural models have identified some very significant new cases.
WI	The filters/algorithms that are specific to Wisconsin Medicaid benefit areas or relate to Medicaid policies. This has enhanced enforcement or educational activities with providers, depending upon the individual circumstances.

\*Only States that responded to the questions are reflected above.

Section IV

**Vendor Products/Services Used by the States**

Based on Section IV of the questionnaire, we have provided a compilation of vendors, the products and services they provide, as well as the States that use them. Also included are brief descriptions of the strengths of the vendor products and services, as supplied by the States.

*Vendors Products/Services*

The following chart identifies the vendors and their products and/or services that are being used. Thirty-five States provided responses. **[Note: The same information, sorted by vendor, is presented in another chart, which is included in this Guide as Appendix 1.]**

*States	Investigatv Services	Med Staff Services	Training	Software Suppliers	FAD Consult.	Fiscal Intermed	Operates MMIS	Operates FADS	Recovers Overpaymnts
AL	1- EDS' SURS; 2- Data Base Tech's Auto Track XP	1- Codman's Practiscan; 2- EDS' Pandora	EDS			EDS	EDS		1. EDS' RAMS II; 2. Unicore Med's - Alpha II
AK	1. Deloitte & Touche 2. FHSC	FHSC	FHSC	VIPS		FHSC	FHSC	FHSC	FHSC
CA			EDS	EDS		EDS	EDS		
CO			Consultec			Consultec	Consultec	Consultec	
CT			EDS			EDS	EDS		
DE						EDS	EDS	EDS	EDS
FL							Consultec		
GA		OASYS	1. EDS 2. Medstat	1. EDS 2. Medstat	Medstat	EDS	EDS	Medstat	
ID				EDS		EDS	EDS		PCG
IN	HCE	HCE				EDS	EDS	HCE	1. EDS 2. HCE
IA	Consultec	Consultec	Consultec			Consultec	Consultec		Consultec
KY							Unisys		1. Sapiant/ Health Watch 2. HMS
LA	Unisys	Unisys	Unisys	UPI Gov't Group		Unisys	Unisys	Unisys	Unisys
MD				OS2 Warp					
MA		U. Mass Med. Ctr.							
MI			1. UPI 2. BULL	UPI					
MS		EDS	EDS	EDS		EDS	EDS		EDS

	Investigatv Services	Med Staff Services		Software Suppliers	FAD Consult.	Fiscal Intermed	Operates MMIS	Operates FADS	Recovers Overpaymnts
MO							GTE Data Services		
NH				EDS		EDS	EDS		EDS
NJ	Horizon BCBS			Builders			Unisys		
NM						Consultec	Consultec		
NY		IPRO		1. IBM 2. Oracle	IBM	CSC	CSC		
NV						Anthem BCBS			
NC		Medical Review of NC					1. ITC 2. Consultec		
		Peer Review Systems							HMS
OK			Unisys	Unisys		Unisys	Unisys		
PA				Microsoft					
RI	EDS			EDS		EDS	EDS		EDS
SC							Clemson Univ.		
TN							EDS		EDS
TX		Contracted medical professionals	ANACAPA ; Reid & Associates; Assoc. of Certified Fraud Examiners	Sypder; Business Objects; Microsoft		NHIC	NHIC	EDS	
VA							FHSC		
WA							Consultec	HWT	
WI		1. EDS 2. UGS 3. Meridian	EDS	EDS		EDS	EDS		EDS
WV		WV Medical Institute					Consultec		TPL Public Consulting Group
WY		Consultec	Consultec	Consultec		Consultec	Consultec		Consultec

\*Only States that responded to the question are reflected in the chart above.

**Other Vendors (and Their Products/Services) Used by States**

Florida                      Consultec (operates DSS)

Massachusetts            MassPRO, Brown & Brown, MRB Associates, Fanueil Assoc. (services of these vendors not specified)

Mississippi                Codman Research Group (services not specified)

New Jersey                First Health (pharmacy prior authorization)

New York                  Oracle (datamart consultant)

South Carolina            BCBS, OASYS (services not specified)

### Strengths of Vendor Products/Services

States were asked to identify, and explain the use of, key vendor products and services. States were also asked to describe the strengths of these products and services. The narrative responses of the 33 States answering this part of the questionnaire are presented in the following chart.

*States	Key Vendors	Products/Services Utilized	Strengths of the Vendor Services
AL	EDS (key vendor) bid some of their proprietary software as well as software by Codman, HBOC etc. EDS put the "package" together. The State purchased Alpha II and use of Auto Track XP to assist with SURS.	To perform provider and recipient reviews, to prepare suspect cases for the MFCU and to assist in investigative cases.	It is flexible, versatile and secure. RAMS II SURS profiler is fast, user friendly, and has a high level of control by user.
AK	<ol style="list-style-type: none"> <li>1. FHSC – Fiscal Intermediary – MMIS management;</li> <li>2. Deloitte Consulting – Administrative Record Review;</li> <li>3. VIPS –STARS support services;</li> <li>4. PCG TPR recovery.</li> </ol>	<ol style="list-style-type: none"> <li>1. FHSC - Fiscal Intermediary – MMIS management;</li> <li>2. Deloitte Consulting – Administrative Record Review;</li> <li>3. VIPS –STARS support services;</li> <li>4. PCG TPR recovery.</li> </ol>	<ol style="list-style-type: none"> <li>1. FHSC/MMIS – statistical analysis and general program assistance;</li> <li>2. Deloitte Consulting – record review expertise;</li> <li>3. VIPS – online, user friendly claims analysis tool;</li> <li>4. PCG -- may identify patterns of inappropriately processed claims through TPR recovery process</li> </ol>
CA	EDS – claims processing and CA-MMIS	EDS conducts computer edits and audits on claims, and produces reports to monitor and audit program.	It analyzes all claims data prior to payment.
CO	<ol style="list-style-type: none"> <li>1. Consultec -- MMIS and PDCS (prescription drug card system)</li> <li>2. VIPS – STARS (services tracking, analysis and reporting);</li> </ol>	The products/services are used for data analysis, rate setting, focused medical review, provider utilization profiles comparison, FAD, and budget forecasting.	Consultec provides and operates SURS for Colorado Medicaid.
GA	<ol style="list-style-type: none"> <li>1. EDS – MMIS/SURS</li> <li>2. Medstat Group – DSS/EIS</li> </ol>	They are used for gathering data for investigations, generation of SURS reports, program assessment/fraud detection, and provider enrollment reviews.	Medstat has the ability to obtain information on a timely basis. EDS meets Federal compliance with SURS requirements.
IN	EDS	EDS has control of design changes & maintenance operations.	Indiana AIM system has abilities to specify numerous parameters
IA	Consultec – SURS unit does a very good job in performing reviews of provider participation in Medicaid. The education/recoupment letters are very useful.	The SURS unit, with the assistance of the DSS, is able to conduct reviews, educate providers, collect overpayments, and make referrals to Medicaid Financial Control Branch.	No Response

States	Key Vendors	Products/Services Utilized	Strengths of the Vendor Services
KS	1. BCBS of Kansas 2. Kansas Foundation for Medical Care (PRO)	Operates MMIS, pays claims, conducts SURS review, operates complaint and grievance department.	It is not required as a primary function -- one person serves as a fraud analyst and liaison to the MFCU.
KY	1. Unisys 2. Health Mgmt Services 3. Sapien/Healthwatch	1. Claim Processing/MMIS 2. TPL recoveries 3. Fraud and Abuse detection	They provide fast manipulation of data.
LA	1. UNISYS 2. UPI Government Group 3. MEDSTAT	UNISYS provides SURS related functions in association with UPI Government Group under direct supervision of State Program Integrity Management.	The vendor is familiar with claims payment system, medical issues, and State Medicaid policy. Vendor has flexibility of private sector management.
MD	UPI Government Group LLC	CS-SURS produces reports for use by the State Utilization Review Staff that will provide comprehensive profiles of the utilization of services by providers and recipients of the Medicaid Program. These reports are used to assist in the detection of fraud and abuse, monitor quality of service, and provide a function for the development of program policy.	The user has the capability to perform all of the services, but the vendor will help with all of these services when requested by the user. Some of the strengths of the vendor services are that it allows each coordinator to work at their desk and to easily design reports, specify what data are to be used in reports, run reports, view reports on-line, and save reports for future viewing/printing.
MA	U. Mass. Medical Center; MassPRO; Brown & Brown; MRB Associates; Fanueil Assoc. -- U. Mass. Medical has an agreement with the Division to provide nurse reviewers to assist in the program integrity review activities. The Division has contracts with the above vendors to perform audits/reviews on providers selected by the Division. The vendors perform their reviews in accordance with a standard review process.	The Division selects providers based on its SURS based program from which the nurse reviewers compile reports. The cases are given to the vendors: (1) to determine non-compliance with the Division's program regulations; (2) to identify quality of care issues; (3) to identify an overpayment; and (4) to identify a suspicion of fraud, in which case the Division would refer the matter to the State's MFCU. The nurse reviewers also perform quality reviews of the vendor's audits as well as conduct mini-reviews and/or audits on providers. Informal conferences with the provider are conducted by the vendors with Division staff.	Without the vendor services, the Division would not be able to perform the number and quality of audits that it currently conducts.
MI	1. BULL Information Systems – system support of NCR teradata 2. UPI Government Group – PC SURS	1. BULL – performs data updates and maintains data model. 2. UPI – conducts production runs and provides assistance in setting parameter.	The vendors provide the reports/production. Department staff utilize the reports, ad hoc reporting and medical expertise to identify fraud/abuse.

States	Key Vendors	Products/Services Utilized	Strengths of the Vendor Services
MN	BULL	All claims histories previously run on the mainframe are now produced with the data warehouse.	SIRS uses the data warehouse to produce all of the provider claims histories that are needed to conduct investigations of fraud and abuse. With the data warehouse, we are able to request queries using SIRS staff who are trained in identifying patterns of fraud and abuse rather than relying on the efforts of an outside party. All queries are run at the PC level and they generally take only minutes if not seconds to run. The warehouse provides the speed needed to identify potential problems as well as to react and resolve complaints on a more timely basis. There are five years of claims history available to query against. There are far fewer limitations on what claims information SIRS can request. The warehouse has become an invaluable tool to the SIRS unit. It allows investigators the ability to hone in on a particular problem identified. It provides strong documentation that is used to aid in the recovery of inappropriate payments, the prosecution of a provider or the restriction of a recipient. The warehouse provides staff with summary reports used to identify aberrant activity. In short, it allows us to act more effectively and efficiently.
MS	EDS	Claims payment	Vendor produces reports timely, has expertise in SURS, enables SURS staff to make changes appropriately, etc.
MO	GTE Data Services	Claims processing, recipient services hotline, TPL lead verification, and MMIS/SURS operations.	Vendor has a few people with extensive experience with SURS subsystems.
NE	<ol style="list-style-type: none"> <li>1. Medstat – Decision Support System</li> <li>2. First Health Services – Point of Purchase drug program</li> </ol>	<ol style="list-style-type: none"> <li>1. Medstat is used primarily for managed care encounter data and QA functions.</li> <li>2. First Health is used to process drug claims and transfer to NE MMIS for payment.</li> </ol>	<ol style="list-style-type: none"> <li>1. Medstat is our only access to encounter data.</li> <li>2. In NE’s opinion, First Health has good ad hoc reporting related to drug claims and useful monthly UR management reports.</li> </ol>
NH	EDS	MMIS – claims processing system SURS – utilization review MARS – financial system GQL – ad hoc tool	SURS can identify provider/recipient practices/services that except from the assigned peer group. SURS data is collected from claims payment history on the MMIS system. Edits and audits are also in place on the MMIS system. GQL is an additional tool that allows for expanded data collection in conjunction with the SURS system.

States	Key Vendors	Products/Services Utilized	Strengths of the Vendor Services
NV	Anthem Blue Cross/Blue Shield	It is the fiscal agent for Nevada Medicaid.	The vendor provides a weekly report of rejected claims and a report of claims paid.
NJ	<ol style="list-style-type: none"> <li>1. Health Management Systems, Inc.</li> <li>2. First Health</li> <li>3. Horizon BC/BS of NJ, Inc.</li> <li>4. UNISYS</li> </ol>	<ol style="list-style-type: none"> <li>1. Health Management Systems, Inc. – TPL recovery services, including fraud/abuse related TPL recoveries; data matches /mining against other insurers; and duplicate billing matches.</li> <li>2. First Health – Pharmacy prior authorization for various edits</li> <li>3. Horizon BC/BS of NJ, Inc. – On-site pharmacy audits, Inpatient DRG audits, Hospital TPL audits</li> <li>4. UNISYS – Fiscal agent</li> </ol>	<ol style="list-style-type: none"> <li>1. In SFY 1999, \$24 million in Federal and State funds were recovered from TPL related payments to hospitals and home health agencies, much of which was recovered by Health Management Systems, Inc.</li> <li>2. In CY 1999, \$.42 million in Federal and State funds were recovered from Horizon BC/BS of NJ, Inc. pharmacy audits.</li> <li>3. In SFY 1999, Horizon BCBS of New Jersey recovered \$4.57 million in hospital DRG overpayments.</li> </ol>
NM	Consultec – fiscal agent	Produces quarterly SURS reports and ad hoc reports.	It assists with reports because it knows the database.
NY	<ol style="list-style-type: none"> <li>1. CSC</li> <li>2. IPRO</li> <li>3. Oracle</li> <li>4. IBM</li> </ol>	To identify potentially aberrant practices of both providers and recipients, to target known aberrant practices, and to evaluate services provided.	They allow manipulation of data to facilitate provider profiling.
NC	<ol style="list-style-type: none"> <li>1. ITC makes use of multiple detection technologies to identify a wide range of fraud, waste &amp; abuse.</li> <li>2. Consultec provides a certifiable replacement to MMIS SURS that supports CMS requirements.</li> </ol>	<ol style="list-style-type: none"> <li>1. ITC's browser-based interface provides access to a wide array of fraud filters, point and click drill-down to claim detail level, customized screens/reports, multi-level security, random sampling etc.,</li> <li>2. Consultec product is a rule-based, client server replacement for mainframe SURS.</li> </ol>	In NC's opinion, ITC is customer oriented, with an intuitive interface. SPOTLIGHT uses advanced modeling techniques such as neural networks to identify changing patterns of fraud. OmniAlert provides users with the ability to create an almost unlimited number of studies combining library elements into projects.
OH	<ol style="list-style-type: none"> <li>1. Health Management Services (HMS)</li> <li>2. Peer Review Systems (PRS)</li> </ol>	<ol style="list-style-type: none"> <li>1. HMS collects TPL and tort overpayments.</li> <li>2. PRS covers hospital services.</li> </ol>	PRS produces reports of overpayments-upcoding.
OK	Unisys provides maintenance of MMIS, performs claims processing, certain provider enrollment functions, and pharmacy point-of-sale. Also, it is currently in the process of implementing McKesson HBOC Claim Check to compare claims by procedure code and diagnosis and Unisys Corporation's prospective Drug Utilization Review (UNIDUR)	Providers submit Medicaid claims to vendor for processing. The vendor processes claims, produces remittance advice and mails warrants to the providers. The vendor provides payment history online, expedites claims adjustments, and subsequently corrects claims history as needed.	Vendor provides direct communication with subcontractor who owns the proprietary system. Their strengths are in the area of customer and system support. In OK's opinion, the vendor is very quick to respond to needs and requests, and has extensive knowledge of systems and Medicaid programs. It also provides training on an as-needed basis as frequently as required for users to be successful in data analysis and job performance.

States	Key Vendors	Products/Services Utilized	Strengths of the Vendor Services
PA	Microsoft Office Suite 2000	Word processing, PowerPoint, Excel and Access.	Assists in manipulating data for review and further action. Produces readable and informative reports.
RI	EDS	MMIS/SURS	Dedicated SURS staff who have system access to produce SURS reports and Business Objects to investigate all aspects of provider/recipient activity.
SC	Operation of MMIS: third party collections; updating policy files; sends out billings retroactively; front-end claims processing.	MMIS utilizes Clemson mainframe and personnel resources; claims processing.	No Response
TN	All hardware/software contained within the TCMIS is owned by the State.	Various components of the TCMIS are operated/maintained by key vendors (EDS, First Mental Health, etc.).	No Response
TX	<ol style="list-style-type: none"> <li>1. EDS is the primary contractor.</li> <li>2. HNC Software's proprietary tools, such as Spyder™, are used for analysis and case management.</li> <li>3. Business Objects™ software is used for ad hoc queries and data mining.</li> <li>4. Lexis-Nexis is the primary vendor for data brokering, with a secondary contract to Choice Point.</li> <li>5. NHIC is the vendor for the MMIS, which includes the SURS.</li> <li>6. Maximus is the enrollment broker for the managed care portion of Texas Medicaid.</li> <li>7. Birch &amp; Davis is the vendor for the PCCM model of managed care.</li> <li>8. THQA is used for quality monitoring.</li> </ol>	<p>The vendor, who produces suspect lists resulting from the Targeted Detection Queries (TQs) and/or neural models, operates the MFADS. Investigators, researchers, and analysts use the Spyder™ tool to do on-line analysis, as well as case management. Investigators also use Business Objects™ to develop ad hoc queries from the MFADS platform, prepare special reports, and/or do other analytical work that supports their investigations. Business Objects™ is also the tool used for the ad hoc query platform. We use the Lexis-Nexis and Choice Point services to obtain information on providers under investigation.</p>	<p>Knowledge of the Medicaid Program, especially the Texas Medicaid program, including knowledge of data structures and systems. Experience in manipulating large data sets, combined with good knowledge of policies and procedures used by agencies in Texas. In TX's opinion, the strength of HNC Software lie in its extensive knowledge and successful track record in the use of neural technology to detect fraud, waste, and/or abuse.</p>

States	Key Vendors	Products/Services Utilized	Strengths of the Vendor Services
WI	<ol style="list-style-type: none"> <li>1. EDS is the prime fiscal agent contractor.</li> <li>2. UGS – subcontractor</li> <li>3. Meridian Resources Innovative Resource Group – subcontractor</li> </ol>	<ol style="list-style-type: none"> <li>1. EDS has overall responsibility for Fiscal Agent activities. It provides technical support for the MMIS, new project/benefit implementation, maintenance of managed care program, Wisconsin's decision support system, and MMIS reporting (MARS, SUR and all others).</li> <li>2. UGS provides FFS claim entry, consultants to review/approve prior authorizations, provider correspondence, and provider maintenance.</li> <li>3. Meridian provides high-end professional services, supporting program evaluation, population based studies, etc.</li> </ol>	Experience and educational background of employees, and ability to effectively communicate among all contractors.
WV	Consultec – MMIS/SURS/DSS	Daily operations	No Response
WY	Consultec: Omni Alert, DSS, provider software for electronic billing	Omni Alert and DSS enhance fraud and abuse detection and studies. Provider software for electronic billing streamlines claims processing.	Consultec's Omni Alert has expanded capabilities to detect fraud and abuse, and to enhance other studies and research.

\*Only States that responded to the questions are reflected in the chart above.

Section V

**Planned Replacements and/or Enhancements**

This section addressed planned upgrades to or replacement of existing systems. States identified the enhanced features or new systems being acquired, as well as the timeframe for acquisition. We also asked for wish lists from States that listed no acquisition plans.

Of the 47 responses received, 31 States indicated that they were planning to acquire enhancements to or replacements of their current systems. Most of these acquisitions were anticipated to take place within two to three years. The most sought after upgrades or new systems were: a replacement SURS (19 States), encounter data processing capability (14 States), FAD software (13 States), and a DSS (13 States). In addition, 24 States anticipated obtaining their enhancements or replacement systems within two years of the date they were surveyed.

Of the States listing no acquisition plans, eight States indicated that they would like to get data mining capabilities, eight States would like FAD software, and six States wanted a DSS with FAD capabilities.

*Planned Replacements/Enhancements*

The following two charts indicate: (1) the upgraded features or new systems that the States are planning to acquire, and (2) the anticipated timeframe for the upgrades or replacements.

*States	Stand Alone FADS	FAD Software	Case Management	SURS Replacement	Statistical Analysis	Case Mix	DSS	New MMIS w/ FADS	Encounter Data
AL		X							
AK				X	X	X	X	X	X
AR		X							
CA	X	X	X	X	X		X		
CT		X		X	X	X	X		X
DE							X	X	X
FL				X					
GA		X		X	X		X	X	
IL			X	X			X		
ME		X		X					
MA		X							
MI				X					
MN		X							
MT	X	X	X	X	X				X
NH									X
NJ							X		X

States	Stand Alone FADS	FAD Software	Case Management	SURS Replacement	Statistical Analysis	Case Mix	DSS	New MMIS w/ FADS	Encounter Data
NM				X	X				X
NY		X	X	X	X		X	X	X
OH		X		X	X		X		X
OK			X	X	X		X	X	X
OR				X	X		X		X
PA				X					
SD		X		X					
TN					X	X	X		X
TX				X		X	X	X	
UT			X						X
VA				X					
WI		X		X					X

\*The chart above listed 28 States that responded to the question. However, KS and NV are planning to acquire a new MMIS, and MO is planning to enhance its current SURS system. These States are listed under Planned Upgrades, bringing the total to 31.

**Other Planned Upgrades:**

- AL HBOC's GMIS Claim Check
- AK Enhanced scope and flexibility
- IL Data mining, automated code review software, Executive Information System (EIS)
- KS New MMIS
- ME Claims management system
- MO Enhance current SURS
- NV New MMIS
- NH MMIS reprourement
- NY Data mining
- OH Quality measurement tools
- OK Data mining and geographic presentation
- SD PC-based SURS
- TX Expand MFADS to client applications and other programs
- UT Data warehouse
- VA New MMIS
- WI Integrate with existing DSS

***Anticipated Timeframes for Upgrades or Replacements***

12 months*	18 months*	24 months*	36 months*
CA	AL (HBOC)	AL (FAD)	AK
FL	DE	AR	KS
IL	MO	CT	ME
MA	OH	GA	NM
MI	OK	MN	NV (2004)
MT	TN	NH	PA
OR	UT	NJ	SD
TX (MFADS)	VA	NY	
	WI	TX (New MMIS)	

\*The timeframes listed are based on the dates the States submitted their questionnaires. The estimated timeframes commenced between July 2000 and September 2000.

***“Wish Lists”***

The following chart indicates enhancements that States would like to acquire to improve their system even though they identified no procurement plans at the time of the questionnaire.

*States	DSS w/ FADS Capabilities	FADS Software	Data Mining	Other
AK	X		X	
ID		X	X	
KS			X	
KY		X		
MD				Data export and drill down
MN		X	X	Data visualization
MS	X	X	X	PC-based SURS
NE	X			
NC				Integrated case management and tracking
NY	X	X	X	
SC	X	X	X	
TN	X	X	X	
WV		X		

\*Only States that responded to the questions are reflected in the chart above.

## Section VI

### **Innovative Data Collection and Reporting Methods/Best Practices**

In the last section of the questionnaire, States were given the opportunity to describe effective or innovative methods and/or best practices in the following four areas:

- ♦ Effective practices in using a State's existing information systems to detect patterns of fraud and abuse,
- ♦ Innovative features of State systems,
- ♦ Methods for collecting and reporting data on concerns and complaints regarding beneficiary fraud and abuse, and
- ♦ Methods for collecting and reporting data on concerns and complaints regarding managed care fraud and abuse.

#### *Effective Practices in Using Existing Information Systems*

The States' responses regarding effective practices in using their existing information systems were as follows:

<u>*States</u>	<u>Effective Practices</u>
AK	Statistical sampling and extrapolation capabilities for claims payment reviews of medical records. Desktop claims research capability with STARS.
CA	Pre-Check Write System -- reviews for billing codes and trends on a weekly basis.
CO	Utilizing STARS to perform billing comparisons between providers classified as Home Health Agency (HHA) and Home and Community Based Service (HCBS) providers to determine overlapping services.
CT	Claims data is used to audit providers.
FL	Generalized analysis, chi-square statistical analysis, 1.5 weekly reports on paid claims, and threshold reports.
GA	Target areas of overutilization and suspicious claims activity and billing patterns.
HI	No unique practices, ad hoc reporting on area of concern identified by the SURS.
IN	The system audits each claim against 36 months of claims history. The system may be queried to identify "outliers" of the "norm" using multiple parameters.
IA	The State uses SURS to set parameters and exceptions to open new provider cases. The DSS is used to look at individual provider claims. Desk review of medical records is conducted if a potential problem is detected.

## States

## Effective Practices

IL

- (1) Payment Accuracy Review (PAR) -- Illinois Medical Assistance Program (MAP) measured payment accuracy in its fee-for-service program. The study determined that the department correctly spends 95.28%, +/- 2.31%, of the dollars paid to providers. One of the project's most significant findings was that almost one-third of all payments to non-emergency transportation were inappropriate. PAR was one of the driving forces in agency efforts to tighten control and monitoring of this provider type.
- (2) Non-Emergency Medical Transportation (NEMT) -- In December 1999, the OIG's Bureau of Medicaid Integrity (BMI) released a report on NEMT. BMI reviewed the 64 highest paid non-emergency transportation providers and issued the following recommendations:
  - (a) NET providers should be included in the proposed Random Claims Sampling project,
  - (b) the Department should require standard documentation forms for trip tickets and dispatch logs, and
  - (c) the Department should privatize the prior approval process.
- (3) Medicaid Fraud Prevention Executive Workgroup (MFPEW) -- This workgroup consists of the OIG and Medicaid policy and program staffs. The workgroup meets monthly and is co-chaired by the Deputy Medicaid Director and the Deputy IG for Operations. MFPEW develops measures consistent with the provision of quality health care to combat fraud and abuse in the MAP. These staffs collaborate to develop new fraud prevention methods and ensure MMIS's effectiveness in preventing and detecting improper payments.
- (4) Methods to Monitor Newly Enrolled Providers -- MFPEW seeks to perform on-site post-enrollment visits for newly enrolled transportation and Durable Medical Equipment (DME) providers to verify their existence and legitimacy. Performing on-site visits will allow the Department to verify the provider's existence, prevent potentially fraudulent claims, verify current data and potentially reduce returned mail, establish a positive relationship with the provider, respond to record-keeping questions, and educate the provider. The OIG's BMI is performing a six-month on-site pilot project with transportation and DME providers. The visits began in March 2000 and will be conducted within two months after enrollment. At a minimum, the visits will include an interview with the provider and an inspection of their premises to confirm their existence and proper inventory. Periodic updates of the pilot will be shared during MFPEW meetings. The results of the six-month pilot will be discussed with internal stakeholders and an affirmative decision will be made on how to proceed.
- (5) Spiked Payments -- In July 1999, the OIG implemented a spiked payments program to monitor provider payments and services over a rolling 24-month period. The goal is to earlier identify aberrant payment patterns exhibited by providers and respond to them in a rapid fashion. Any dramatic increase or decrease in billings triggers human intervention to determine what appropriate action should be taken, e.g., referral to MFCU, investigation or audit.
- (6) Fraud Science Team (FST) -- The OIG is conducting an initiative referred to as FST to develop new fraud detection routines that can be applied prepayment or early postpayment. The primary source of information is the Department's recently implemented data warehouse. A later phase of the warehouse contract calls for implementation of a data mining feature that will assist in the development of fraud detection routines. BFR has documented more than 600 fraud schemes perpetrated against payers, has developed algorithms for many schemes and preliminary computer code to detect several schemes.

States

Effective Practices

KS	MFCU makes good use of DSS by analyzing referrals with it. It has helped them work on global settlements with other State MFCUs. Also used to research Medicare fraud alerts and to do research when setting up cases.
KY	Fraud detection vendor uses neural networking technology.
LA	The State employs a "registered nurse analyst model" in SURS case review. Once a case is opened, the State generally reviews every service paid to the provider for the time period under review.
MD	Analyze encounter data including enrollment information, and test existing edits in the FFS system.
MA	Particular attention is paid to rapid growth, especially of new providers and quarterly increases in the average dollars paid per member. Peer comparison criteria are used to identify potentially aberrant patterns of behavior.
MI	The State uses innovative approaches to formatting the data. The State worked with UPI in shifting from summary data to episodic care runs.
MS	Use SURS utilization reports to obtain the exceptions, and then use MMIS to obtain additional support data.
MO	One of the most effective practices is unannounced onsite review of providers.
MT	Referrals and REOMBs that target providers.
NE	SURS exception profiles; Point of Purchase drug program
NV	The SURS unit receives a weekly rejected claims report from the fiscal agent and special reports from mainframe database.
NH	The State works with the MFCU to maintain/develop provider profiling. Ad hoc data to enhance SURS reporting. Additions to MMIS claims editing system based on SURS report findings.
NJ	The State utilizes numerous reporting and mining techniques to obtain data for trending/modeling.
NY	A cross-link between known bad recipients and bad providers. For example, the State targets provider numbers used on forged prescriptions and investigates the recipients who are getting prescriptions utilizing this provider number. The State identifies potentially aberrant practices using the SURS reports and targets providers showing these aberrant billing patterns.
NC	Self-audit tools package offered to any providers with technical assistance. Annual survey to measure claim error rate (2.12%, 2.12%, 2.19% over last three years). Architecture and integration of data warehouse, LAN, and FADS software.

States

Effective Practices

OK	Includes displays of claims data on standard SURS report profiles, i.e., display by dollars and unit of services the Top 10 Recipients.
PA	Identification of providers with aberrant patterns for further review and application of appropriate sanctions. Identification of recipient usage and misutilization of services. Selecting candidates for recipient restitution (lock-in) program. Analysis of high or low volumes of services including drugs.
RI	In addition to standard SURS reports that show deviations in practice patterns, ad hoc [reporting] enables analysts to profile providers and recipients and search for additional abuse patterns.
SC	Misutilization/overutilization of certain dental codes. Misutilization of "Brand Medically Necessary".
TX	The Texas MFADS has resulted in recoveries exceeding \$4.3 million in 27 months. In the same period, the Texas MFADS has identified almost \$9 million for recovery and has been responsible for almost \$2 million in cost savings to the Medicaid program. Projected efficiency gains average 125% of the project cost as of February 29, 2000. Texas was, to our knowledge, the first State to implement neural and learning technology for the detection of fraud, waste or abuse in health and human services program. The MFADS has received one national award for innovative use of technology and has been featured in national publications such as <i>Governing</i> , <i>Government Technology</i> , and multiple trade publications.
UT	EOMB process, recipient eligibility closure report, and referral process
VA	Occasionally, SAS reports are requested to help identify potential providers who may have a certain potential abuse based on the focus of the SAS request.
WV	Thoughtful analysis and networking with other payers
WY	ERI reports -- DSS and Omni Alert facilitate [identification of] possible trends in health care to include quality of care, areas that require education, and possibility of fraud and abuse.

\*Only States that responded to the questions are reflected above.

***Innovative Features of State Systems***

The States' responses regarding innovative features of their systems were as follows:

<b><i>*States</i></b>	<b><i>Innovative Features</i></b>
AK	The State is capable of performing both simple and complex claims queries via STARS, and frequency distribution via MMIS. Both MMIS-SURS and STARS do not require programming staff for effective utilization.
CA	PEWS checks for new or re-entry providers. PTA checks for large changes on a quarterly basis.
CO	The State has the capability of querying against 5 years of data online and, if necessary, the ability of gathering data beyond 5 years via ad hoc capability.
FL	Upfront edits installed to prevent inappropriate payments.
IN	The system allows the individual to determine specific parameters as a monitoring range. The user may target specific areas and patterns that may indicate overutilization or abuse.
MD	EOC is a powerful feature of the CS-based SURS system that allows user to identify recipients who meet a set of conditions ( the trigger event), and all related services in terms of time (days before, during or after). Each of these trigger events plus associated services is called an EOC. When CS-based SURS finds a run that specifies that the use of an episode, the system creates the episodes and assigns each occurrence of an episode a unique number called an Episode ID.
MA	The ERI is imported as an excel workbook (3 spreadsheets) and contains dollars paid and average dollar per recipient per year. The providers contained in the calendar year of data will be saved and this allows us to conduct a quick check of a provider's history, on query, using the "find" command. It contains all active providers, not just those that are aberrant. The Division has found this tool useful.
MI	The State uses innovative approaches to formatting the data. The State worked with UPI in shifting from summary data to episodic care runs.
MN	SIRS uses the data warehouse to produce all of the provider claims histories that are needed to conduct investigations of fraud and abuse. The warehouse provides the speed needed to identify potential problems as well as to react and resolve complaints on more timely basis. There are five years of claims history available to query against. There are far fewer limitations on what claims information SIRS can request. The warehouse has become an invaluable tool to the SIRS unit. It allow investigators the ability to hone in on a particular problems identified. It provides strong documentation that is used to aid in the recovery of inappropriate payments, the prosecution of a provider or the restriction of a recipient. The warehouse provides staff with summary reports used to identify aberrant activity. In short, it allow us to act more effectively and efficiently.
MS	Providers were limited to two class groups for exceptions, but can now be excepted in five class groups.

States

Innovative Features

MO	The capability to have a random sample for specific provider claims and a State regulation that allows extrapolation results in productive onsite reviews.
NJ	The State monitors all provider payments weekly against 26 weeks of history to detect spikes in payments.
NY	FAMS allows users to create their own algorithms and incorporate them into models in combination with algorithms created by the software vendor.
NC	1) Provider self-auditing initiative and 2) full automation of Medicaid information to include digital claims imaging, Report to Web, provider call tracking, browser based query of the MMIS, etc.
OK	EOC, multiple displays, and the ability to run up to 3 jobs simultaneously.
SC	CS-Based SURS is very flexible.
TX	The State believes the entire system is an innovative feature. However, if one feature is to be selected, it would be the PC-based tools that, in a matter of minutes or hours, allow investigators to complete reports and ad hoc queries that previously took 2-3 weeks. Also, the key to efficient data mining is good data. The State believes the process of extraction, cleansing, and loading data into the MFADS platform, and the organization of data within the platform is what makes the system so efficient.
WI	All audit activities are coordinated via a central tracking mechanism.
WY	Omni Alert and DSS provide timely alerts. The State does not have to wait for information (monthly/quarterly).

\*Only States that responded to the questions are reflected above.

<b><i>Beneficiary Fraud and Abuse Data Collection</i></b>
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The following States identified the methods they use for collecting and reporting data on concerns and complaints regarding beneficiary fraud and abuse.

**\*States**

**Beneficiary Fraud & Abuse**

AL	The State uses a toll-free fraud hotline.
AK	The State uses the MMIS-SURS recipient utilization profiling and the STARS claims analysis.
CA	The State collects data through recipient claims detail reports in the CA-MMIS system and through beneficiary restrictions.
CO	Customer service hotline and fraud and abuse referral form for collection and reporting.
CT	Standardized complaint procedures
DE	Run drug regimen reports from DBII, which are pulled from paid prescription claims.
FL	The State uses a toll-free complaint line.
GA	The State has investigative staff assigned specifically to this effort. There is a toll-free number for recipients or providers to call. EOMBs go out to recipients to confirm services rendered.
IL	Mainframe and Server Based Tracking System – Develop a consolidated case tracking management system where all of State OIG fraud and abuse efforts are maintained in one system.
IN	The recipient history report can obtain all recipient claim activity for a date range, including dates of service, aid category, types of service, etc.
IA	Recipient SURS is used to open cases. Our contractor that performs recipient health education program and lock-in program conducts desk reviews of utilization patterns by recipients.
KS	The State uses an Access database software program to track all complaints and grievances, which include fraud and abuse. It also uses this software to track lock-in reviews (fiscal agent staff does the tracking).
KY	Hotlines, recipient letters, and REOMB survey
LA	The complaints are handled in the exact same manner as complaints on providers.
ME	Use of complaint software that is tied in with unit's case tracking application. The cases are referred to appropriate agency: MFCU, OIG, DEA or recipient fraud unit.

States

Beneficiary Fraud & Abuse

MD	The same method that is used for providers.
MA	The division has set up a system to track beneficiary complaints by logging all complaints in a central designated unit. The division has a designated person(s) to review and refer beneficiary fraud cases to a law enforcement agency.
MI	Utilize the relational database to investigate complaints concerning recipient abuse.
MN	The warehouse is used to run queries regarding recipient behavior.
MS	Rely on referrals from providers and other beneficiaries.
MO	The State uses the SURS for recipient profiling and referrals from multiple sources, such as providers, caseworkers and law enforcement agencies, to identify potential recipient abuse.
MT	Restricted recipient and REOMB [files].
NE	REOMBs; internal tracking system of cases
NH	SURS reporting system; GQL – ad hoc; NH Bridges -- private transportation claims reporting; and referrals from various sources.
NJ	Stock SURS reporting and ad hoc reporting
NM	There is a separate Access database into which complaints are entered and referred.
NY	Any recipient that shows questionable patterns identified during a provider review is referred to the Recipient SURS Unit for further evaluation.
NC	PI tracks suspected, referred and completed fraud cases (beneficiary and managed care) through an Access database.
OH	All complaints are entered into our complaint DB and then forwarded to a county fraud squad for investigation. NH and patient abuse are forwarded to MFCU. Drug related issues are sent to DUR or recipient lock-in program.
OK	Produce recipient profiles and use of displays on provider profiles.
OR	Use other agency referrals
PA	SURS-CARS-Paid claim history
RI	Referrals to the State's Attorney General's MCFU are made when fraud or abuse are suspected as a result of a SUR review, internal referral or information from the community.
SC	Through DSS county offices, toll free fraud line, REOMB program, website e-mail.

States

Beneficiary Fraud & Abuse

SD	Download claims data from 15 months of history held on MMIS. Arrange data to specifically pinpoint any possible fraud and /or abuse.
TX	The State is currently working on utilization of services and will expand MFADS to a client application that will look beyond utilization and/or eligibility errors to patterns of fraudulent behavior.
UT	Referral process
VA	Telephone and written referrals are logged in Oracle database for tracking and case assignment. Referral form is generated from Oracle database, which then can be sent to other investigative units or agencies. Tracking reports from Oracle include such data as sources of referral, status, disposition, etc. There is a separate database specifically for documenting ER abuse by recipients.
WI	Phone or mail contacts are recorded in a centralized database. Actions taken are included as well. REOMB forms are targeted to recipients that receive services from providers with high abuse situations.
WY	History profiles for both recipients and providers, DSS queries, Omni Alert queries, and the ERI.

\*Only States that responded to the questions are reflected above.

***Managed Care Fraud and Abuse Data Collection***

The following States outlined the methods they use for collecting and reporting data on concerns and complaints regarding managed care fraud and abuse.

<b><i>*States</i></b>	<b><i>Managed Care Fraud &amp; Abuse</i></b>
CA	The State collects data on mainframe at Health and Welfare Data Center (HWDC), and then makes referrals when appropriate.
CO	Customer service hotline, fraud and abuse referral form. Regulatory requirement that Managed Care Organizations (MCOs) provide for a program integrity officer, who will be responsible for detecting potential Medicaid fraud and reporting directly to the MFCU and the Director of the Managed Care Contracting Division.
CT	Standardized complaint procedures
FL	Under development with MCOs
HI	The encounter data system, health plans' complaints, appeals, grievance logs and monitoring of the QA activities of managed care plans including minutes of QA meetings and reviews of suspensions and termination of providers and credentialing and recredentialing. The plans are also required to submit, twice a year, a log of their fraud and abuse activities. This log and the complaints, appeals and grievance logs are shared with the Medicaid Fraud Attorney General and Med-Quest Division's Medicaid Fraud Investigator.
IL	Complete analysis for audits, peer reviews, and investigations.
IN	HCE maintains a database of all concerns and complaints. EDS maintains a log of all managed care issues reported. Issues are reviewed and either resolved or referred for further investigation.
IA	Rely on managed care organizations to report to the Department. A random sample of provider clinical records is done each month.
KS	The complaint/grievance team (Quality Assurance Team) uses the same Access database software to track initial receipt of complaints regarding the Health Maintenance Organization (HMO) part of our managed care program. These complaints are then forwarded to the HMO for resolution. Consumers may also complain directly to the HMO and these complaints are reported back to our Complaint Manager in the form of reports. Our External Quality Review Organization (EQRO) also monitors these. (Same process applies to provider complaints.) The fiscal agent team handles complaints about the Primary Care Case Management (PCCM) part of our managed care program.
KY	Referrals from managed care organizations and hotline

<u>States</u>	<u>Managed Care Fraud &amp; Abuse</u>
MD	The method the State employs to collect and report data regarding concerns and complaints on managed care fraud and abuse is to generate a profile on practice patterns of providers to investigate whether they are outside the norms or acceptable behavior model of their peers or the benefit limits.
MI	The State is in the process of identifying available data and developing a managed care fraud and abuse program.
MN	The warehouse can be used to do the same analysis against encounter claim data. Periodic meetings with MCO counterparts are also used to identify their fraud and abuse efforts.
MS	The State relies on managed care division to report to program integrity.
MO	Concerns/complaints are collected through several different methods. There are procedures for clients and providers to contact the health plans and/or the State Medicaid Agency. Client surveys are performed annually. Concerns and complaints received by the health plans are reviewed and processed by the State. The health plans must submit quarterly and annual reports of internal fraud and abuse activity. The State monitors the health plans for compliance with the fraud and abuse contract requirements.
NE	Information from managed care enrollment staff; and internal tracking system.
NH	There is currently no system in place to collect this information. Contractually, the MCO is required to report any suspected fraud and abuse to Medicaid.
NJ	All allegations of provider and/or practitioner fraud and/or abuse involving MCOs or their practitioners, contractors and/or employees are reported to our Bureau of Program Integrity (BPI) through the staff of our Managed Care Investigative Unit. The allegations are discussed at a weekly clearinghouse meeting, where it is decided if: a) we allow the MCO to investigate, b) conduct a joint investigation with BPI and one or more MCOs, or c) for BPI to conduct the investigation independently. BPI maintains a toll-free fraud and abuse hotline in which individuals can report allegations of fraud and/or abuse directly. These allegations are also discussed at the weekly clearinghouse meeting.
NM	There is a separate Access database into which complaints are entered and referred.
NY	Managed care encounter data is presently available to collaborate associated FFS claims. The coupling of this data allows us the ability to analyze the utilization of services in the program, to isolate aberrant patterns, and to respond to concerns and complaints of managed care fraud and abuse. In addition, our replacement Medicaid system (RMS), which includes a data warehouse component, will allow complete integration of encounter data into our fraud and abuse activities. The incorporation of a common platform will allow us to use a broad range of analytic techniques to investigate concerns and complaints on managed care fraud and abuse, including underutilization of services.

<u>States</u>	<u>Managed Care Fraud &amp; Abuse</u>
NC	PI tracks suspected, referred and completed fraud cases (beneficiary and managed care) through an Access database.
OH	Review of monthly disenrollment, complaints and grievances; monitoring of ER utilization; and review of customer satisfaction surveys and performance measures.
OK	Use of displays on profiles and varied run types such as Ref ID, primary care physician ID, Health Plan ID, etc.
OR	Investigate allegations on log submitted by plans, and MFCU referrals
PA	Request and analyze data received from MCOs. In the process of collecting encounter data. The State will use the data to obtain data/information for review to detect potential areas of fraud and abuse by MCOs as well as individual providers rendering services and recipient reviews of rendered/billed services.
SC	Due to the rural nature of South Carolina, only one MCO remains. Beneficiaries can use the toll free fraud line, the REOMB process, and the website to report concerns and complaints on fraud and abuse.
SD	Download claims data from 15 months of history held on MMIS. Arrange data to specifically pinpoint any possible fraud and /or abuse.
TX	Data for managed care programs is collected in the same manner as data for the FFS program and/or the PCCM model. Claims data is loaded monthly. The other databases in the system are updated, to include client eligibility information, information from the licensing boards, etc., on a monthly or quarterly basis. Algorithms and neural models are rerun on a periodic basis.
VA	Managed care complaints are received by the enrollment broker, who logs these into a tracking system. In addition, DMAS managed care program staff also receive complaints and follow-up.
WI	There is a centralized database that is used to record complaints and follow-up actions.

\*Only States that responded to the questions are reflected above.

## **C. ACRONYMS USED IN THE GUIDE**

BCBS	Blue Cross Blue Shield
CDR	Claim Detail Report
CMS	Centers for Medicare & Medicaid Services
COS	Categories of Service
COTS	Commercial-off-the-Shelf (Software)
CSC	Computer Sciences Corporation
CS-based SURS	Client Server-based SURS
DB	Database
DMAS	Department of Medical Assistance Service
DRG	Diagnostic Related Group
DSS	Decision Support System
EDS	Electronic Data Systems
EIS	Executive Information System
EOC	Episode of Care
EOMB	Explanation of Medical Benefits
ERI	Exception Review Index
ESO	Extended Service Offering
FADS	Fraud and Abuse Detection System
FAMS	Fraud and Abuse Management System
FFS	Fee-For-Service
FHSC	First Health Service Corporation
GOTS	Government-off-the-Shelf (Software)
GUI	Graphical User Interface
HCBS	Home & Community Based Service
HCFA	Health Care Financing Administration

HCE	Health Care Executive
HH	Home Health
HMO	Health Maintenance Organization
HMS	Health Management Services
HWDC	Health Welfare Data Center
The Initiative	National Medicaid Fraud and Abuse Initiative
IS	Information Systems
MAP	Medical Assistance Program
MC	Managed Care
MCO	Managed Care Organizations
MFADS	Medicaid Fraud and Abuse Detection System
MFCU	Medicaid Fraud Control Unit
MFPEW	Medicaid Fraud Prevention Executive Workgroup
MMIS	Medicaid Management Information System
NEMT	Non-emergency Medical Transportation
NH	Nursing Homes
NHIC	National Heritage Insurance Company
OIG	Office of the Inspector General
PCCM	Primary Care Case Management
PC-based SURS	Personal Computer-based SURS
PEWS	Provider Early Warning System
PDCS	Prescription Drug Card System
PI	Program Integrity
PRS	Peer Review Systems
PTA	Provider Trend Analysis
POPS	Point of Purchase
QA	Quality Assurance

RAMS	Retrospective Analysis of Medical Services
REOMB	Recipient Explanation of Medical Benefits
RMS	Replacement Medicaid System
RFP	Request for Proposals
UNIDUR	Unisys Drug Utilization Review
UGS	United Government Services
SAR	Storage and Retrieval
SAS	Statistical Analysis System
SIRS	Surveillance and Integrity Review Section
SQL	Structured Query Language
SURS	Surveillance and Utilization Review Subsystem
STARS	Service Tracking and Reporting System
SVRS	Statistically Valid Random Sampling
TPL	Third Party Liability
TQ	Targeted Queries
VOS	Verification of Services

## D. CAPSULE DEFINITIONS OF KEY DATABASE TOOLS AND FUNCTIONS

Auditing – the process of accumulating and evaluating data to determine whether recorded information properly reflects financial/transactional events.

Data and/or Statistical Data Analysis – the application of statistical and other data analysis techniques to allow the user to make predictions or decisions about certain characteristics of a data set.

Data Mining – the process of analyzing data from different perspectives allowing the user to identify and summarize relationships in databases and infer rules that allow the prediction of future results.

Data Visualization – a tool that provides a broad graphic representation of complex relationships in multidimensional data.

Data Warehouse (or data mart) -- a collection of integrated, subject-oriented databases with the ability to merge operational, informational, departmental and beneficiary data. A key feature of a data warehouse is that data from a transaction-driven operational systems is replicated into a relational database for ready access to large amounts of data outside of the operational system, lending itself well to analytical processing over long, historical perspectives.

Decision Support Tool – a tool that analyzes information to aid in the decision-making process.

Electronic Data Interchange/Electronic Commerce (EDI/EC) – a method of conducting daily business transactions and operations electronically.

Enterprise Reporting – a capability that allows users to easily gather data from various sources within an organization and distribute/share those reports with others in the organization.

Fraud and Abuse Detection System (FADS) – a system that implements neural learning technology for the detection of fraud and abuse in health and human services programs.

Geographic Presentation – a presentation of data against a geographic backdrop (e.g. of claims dispersed across a region).

Model/Scenario Building – an equation(s) or set of rules that attempts to define a particular process or behavior.

Query Tool – a tool that requests and collects customized information from databases.

Record/Case Tracking and Management – the management of data associated with a particular record or case (e.g. open/close dates, dates of key case events, interview notes, etc.).

Surveillance and Utilization Review Subsystem (SURS) – a component of the Medicaid Management Information Systems designed to process information on medical and health care services to assist Medicaid program managers in identifying possible fraud and abuse by providers and Medicaid beneficiaries. State SURS staff perform post-pay utilization review of providers and beneficiaries in order to identify questionable patterns of service delivery and utilization. This type of review uses profiling systems that employ indices of fraud and abuse based on comparisons with normal service utilization and billing patterns.

Trend Analysis and/or Forecasting Analysis – the process of analyzing patterns or repetitive actions to determine future results.

## E. STATE SURS CONTACTS

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AZ	No response			
AR	Floyd H. Sparks	<a href="mailto:Floyd.sparks@medicaid.state.ar.us">Floyd.sparks@medicaid.state.ar.us</a>	(501) 682-8349	(501) 682-8350
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DC	No response			
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OR	Hersh Crawford	<a href="mailto:herschel.crawford@state.or.us">herschel.crawford@state.or.us</a>	(503) 945-5767	(503) 373-7689
PA	No response			

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## APPENDIX I: Vendor Summary

The following chart listing vendor products and services (similar to the chart in section IV) is sorted in alphabetical order by vendor. It provides a convenient reference on what vendors are used in what States.

Vendors	Invest. SVC.	MSS	Training	Software Suppliers	FAD Consult.	FI	MMIS	FADS	Recovers O/P
Anthem BCBS						NV			
BULL			MI						
Clemson Uni							SC		
Codman's Practiscan		AL							
Consultec	IA	1. IA 2. WY	1. CO 2. IA 3. WY			1. CO 2. IA 3. NM 4. WY	1. CO 2. FL 3. IA 4. NM 5. NC 6. WA 7. WV 8. WY		1. IA 2. WY
CSC						NY	NY		
Data Base Tech's Auto Track XP	AL								
Deloitte & Touche	AK								
EDS	1. AL (SURS) 2. RI	1. AL (Pandaora) 2. MS 3. WI	1. AL 2. CA 3. CT 4. GA 5. MS 6. WI	1. CA 2. GA 3. ID 4. MS 5. NH 6. RI 7. WI		1. AL 2. CA 3. CT 4. DE 5. GA 6. ID 7. IN 8. MS 9. NH 10. RI 11. WI	1. AL 2. CA 3. CT 4. DE 5. GA 6. ID 7. IN 8. MS 9. NH 10. RI 11. TN 12. WI	1. DE 2. TX	1. AL (RAMS II) 2. DE 3. IN 4. MS 5. NH 6. RI 7. TN 8. WI
	AK	AK	AK			AK	1. AK 2. VA		AK
GTE DB							MO		
HCE	IN	IN						IN	IN
HMS									1. KY 2. NJ 3. OH
Horizon BCBS	NJ								
HWT								WA	
IBM				NY	NY				

Vendors	SVC.		Training	Suppliers	FAD Consult.	FI	MMIS	FADS	Recovers O/P
Info. Builders				NJ					
I PRO		NY							
ITC							NC		
Medical Institute		WV							
Medical Review		NC							
Medstat			GA	GA	GA			GA	
Microsoft				PA					
NHIC						TX	TX		
OASYS		GA							
Oracle				NY					
OS2Ward				MD					
PCG									ID
Sapient/Health Watch									KY
Spyder; Class object				TX					
TPL									WV
UGS		WI							
U. Mass Med. Ctr.		MA							
Unicore Med's – Alpha II									AL
Unisys	LA	LA	1. LA 2. OK			1. LA 2. OK	1. KY 2. LA 3. NJ 4. OK		LA
UPI			MI	1. LA 2. MI					
VIPS				AK					

## APPENDIX II:

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Special credit must go to Jeanine Baez, the overall project coordinator and author of this document. Bow Eng of the NY Regional Office provided invaluable technical assistance in the development of the guide, and Eileen McGuire and Ashley Robinson, also in the NY Regional Office, provided valuable assistance in proofreading the document.

APPENDIX III

Text of the Questionnaire on the State Systems Used to Detect Fraud and Abuse

**INFORMATION SYSTEMS QUESTIONNAIRE**



**Thank you** for taking the time to complete this questionnaire. The information gathered will be compiled into a “**Systems Resource Guide**” that will provide States with valuable information about available information systems. Please feel free to add or submit any additional information that you consider helpful.

*Tell Us about Yourself*

*Name*

*Title*

*Street address, City, State and Zip Code*

**Telephone number**

**Fax number**

*Your E-mail address*

**Information about Your State**

*Name of State*

*Number of enrolled Medicaid beneficiaries*

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*Your State's annual Medicaid expenditures*

**I. Describe your State's existing SUR system(s) used to help prevent or detect fraud and abuse.**

- SURS I
- SURS II
- RAMS
- PC SURS
- CS SURS
- Other SUR system \_\_\_\_\_

**When was this system acquired?** \_\_\_\_\_

**a) Check all boxes that identify your SUR system:**

- |   |   |
|---|---|
| <input type="checkbox"/> Fiscal Agent's Proprietary System              | <input type="checkbox"/> Only used for System Fraud and Abuse Detection                                 |
| <input type="checkbox"/> Designed by Vendor                             | <input type="checkbox"/> Used with a DSS for Fraud and Abuse Detection                                  |
| <input type="checkbox"/> Designed by State                              | <input type="checkbox"/> Used with a separate Fraud and Abuse Detection (non-DSS component of the MMIS) |
| <input type="checkbox"/> Operated by Vendor                             |   |
| <input type="checkbox"/> Operated by State                              |   |
| <input type="checkbox"/> Used for FFS                                   |   |
| <input type="checkbox"/> Used for Managed Care, Tracking Encounter Data |   |

**b) Has your system been enhanced?**

- YES  NO

**If so, what enhancements were made?**

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**When?** \_\_\_\_\_

**c) Please indicate by checking all applicable boxes listed below, any positions that have direct online, real time access to the SUR or FAD system.**

- |   |  |
|---|--|
| <input type="checkbox"/> SUR Unit                             | <input type="checkbox"/> External Auditors               |
| <input type="checkbox"/> Program Integrity                    | <input type="checkbox"/> Fiscal Office                   |
| <input type="checkbox"/> MFCU                                 | <input type="checkbox"/> Case Mix (Medical Review Staff) |
| <input type="checkbox"/> Rate Setting and Reimbursement Staff | <input type="checkbox"/> Medical Quality Control         |
| <input type="checkbox"/> Internal Auditors                    | <input type="checkbox"/> Others (please specify)         |

\_\_\_\_\_

**II. Identify any SUR enhancement systems used by your state for the prevention or detection of fraud and abuse.**

- Fraud & Abuse Detection System
- Decision Support System (plus enhanced fraud and abuse software)
- Ad Hoc Reporting
- Other (please specify) \_\_\_\_\_

**a) Vendor's Name:** \_\_\_\_\_

**b) Why did you select this system?**

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c) **How long have you used this system?** \_\_\_\_\_

d) **What factors influenced the decision to use this system?**

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### **III. Systems Features and Characteristics**

a) **Which of the following functions best describe your system's ability to prevent and detect fraud and abuse? (Please check all boxes that apply.)**

- |   |  |
|---|--|
| <input type="checkbox"/> Query tool   | <input type="checkbox"/> Auditing                            |
| <input type="checkbox"/> Data mining  | <input type="checkbox"/> Used with the MMIS                  |
| <input type="checkbox"/> Trend analysis and/or forecasting                        | <input type="checkbox"/> Used with the DSS                   |
| <input type="checkbox"/> Data and/or statistical data analysis                    | <input type="checkbox"/> Visualization                       |
| <input type="checkbox"/> Decision support tool                                    | <input type="checkbox"/> Model/Scenario                      |
| <input type="checkbox"/> Enterprise reporting                                     | <input type="checkbox"/> Geographic Presentation             |
| <input type="checkbox"/> Electronic Data Interchange/Electronic Commerce (EDI/EC) | <input type="checkbox"/> Record/Case Tracking and management |
|   | <input type="checkbox"/> Others (please specify) _____       |

b) **If your system has the capability of performing data queries, which of the following features does it possess? (Please check all boxes that apply.)**

- Ability to develop and run ad hoc queries
- Schedule queries to run in the background
- Schedule queries for non-peak hours

- Queries may be run individually or in batch mode
- Other (please specify) \_\_\_\_\_

**c) If your system has the capability of performing data mining functions, which of the following capabilities is it able to perform?**

- Suites (accomplishes multiple discovery tasks simultaneously)
- Classification (predicts an item class based on historical data)
- Clustering (finds groups or related items)
- Estimation (estimates continuous value)
- Link analysis (finds links or dependencies)
- Visualization (interfaces data and dimensions)
- Text mining (predicts values of continuous variables)
- Summarization
- Dimensional analysis (provides access to legacy and relational data)
- Statistical analysis

**d) Does your system support Statistically Valid Random Sampling (SVRS)?**

- YES  NO

**If yes, how is SVRS used by current systems users?**

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**e) Which application does your system allow the user to import data from? (Please select all boxes that apply.)**

- Spreadsheet

- Database
- Word Processor
- Scanner
- Other (please specify) \_\_\_\_\_

**f) Which application does your system allow the user to export data to? (Please select all boxes that apply.)**

- Spreadsheet
- Database
- Word Processor
- Other (please specify) \_\_\_\_\_

**g) Can your system be applied to large data sets?**

- YES  NO

**If yes, what is the largest data set on which your system can effectively perform its specified functions? (Please select only one)**

- Megabyte-sized
- Gigabyte-sized
- Terabyte-sized

**h) If you have a fraud and abuse detection system, which type of filters/algorithms have proven to be most effective in your fraud and abuse detection efforts, and why?**

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**IV. Vendor(s) Products/Services**

**a) Does your State currently use any vendor(s) products/services?**

- YES  NO

**b) Please check all applicable vendor(s) products/services below and then identify the vendor providing the service on the line next to the service.**

- FAD Consultant \_\_\_\_\_
- Fiscal Intermediary \_\_\_\_\_
- Operates MMIS \_\_\_\_\_
- Operates FADS \_\_\_\_\_
- Recovers Overpayments \_\_\_\_\_
- Investigative Services \_\_\_\_\_
- Medical staff services \_\_\_\_\_
- Training \_\_\_\_\_
- Software Supplier \_\_\_\_\_
- Other \_\_\_\_\_

**Please identify your State's key vendor(s) products/services.**

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**Please explain how your State's key vendor(s) products/services are utilized.**

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- c) **In terms of their ability to facilitate fraud and abuse detection, what are the strengths of the vendor services?**

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**V. Wish List: Replacements and Enhancements**

- a) **Does your State have a plan for upgrading or replacing any existing systems? If no, go to (d).**

YES  NO

- b) **If yes, please indicate the upgraded features or new system you seek to acquire by checking all boxes that apply.**

<input type="checkbox"/> Stand alone FADS	<input type="checkbox"/> Case Mix
<input type="checkbox"/> FAD Software	<input type="checkbox"/> DSS
<input type="checkbox"/> Case Management	<input type="checkbox"/> New MMIS w/FADS
<input type="checkbox"/> Replacement SUR	<input type="checkbox"/> Encounter Data capability
<input type="checkbox"/> Statistical Analysis	<input type="checkbox"/> Other _____

- c) **If you anticipate updating or replacing your current system, when do you expect to do so?**

Within 12 months

Within 18 months

Within 24 months

Within 36 months

**d) If you do not have plans to upgrade or replace the existing F&A system, please indicate what enhancements, if any, you would like to acquire that may improve your system.**

- DSS with FAD capabilities
- FAD software
- Data mining
- Other (please specify) \_\_\_\_\_
- none

<b>VI. Data Collection and Best Practices</b>
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**a) Please describe any effective practices your State utilizes in making use of the existing information systems to detect patterns of fraud and abuse.**

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**b) Does your system have any particularly innovative features that you would like to mention?**

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**c) What methods do you use to collect and report data regarding concerns and complaints on beneficiary fraud and abuse?**

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**d) What methods do you use to collect and report data regarding concerns and complaints on managed care fraud and abuse?**

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